

# New with Version 8804

## INCREASED PERFORMANCE THROUGH NEW COMPILERS FOR SIMPACK USER ROUTINES AND CODE EXPORT

In order to take full advantage of new processor features and new code optimisation techniques, SIMPACK has switched to a new and more powerful set of compilers on Windows and Linux. Improved calculation times of up to 30% have been recorded with the new compilers. This change also affects SIMPACK users that work with User Routines or Code Export.

On Linux there is now a choice of using either INTEL Fortran version 9.1 and 10.0 or gfortran as the Fortran compiler. Both compilers must be used in conjunction with gcc 3.4.3. as C compiler. On Windows SIMPACK now uses INTEL Fortran version 9.1 and 10.0 as Fortran Compiler and Microsoft Visual Studio 2005 as C compiler.

To ease transition to the new compilers, SIMPACK versions up to, but not including SIMPACK 8.900, will still support Compaq Visual Fortran 6.6 together with Microsoft Visual Studio 6.0 as the compiler environment for User Routines. On both platforms, Code Export is only supported in conjunction with INTEL Fortran version 9.1 and 10.0 as Fortran compiler.

## NEW FUNCTIONALITY FOR GENERATING PACK&GO STANDALONE MODELS

SIMPACK's functionality of generating a model specific database was completely revised and updated. To reflect the new functionality, that was added to this feature, it was renamed to „standalone model“. The new functionality is ideally suited for archiving models including all referenced database entries as well as for generating snapshots of a model and for sharing models with other users. All data referenced by the model, as well as the model itself are now copied into a separate directory which carries both the current date and time as well as the model name in its name.

This directory contains subdirectories for the main model and it's locally referenced data as well as for the database entries used by a model.

A typical directory structure for a model with the name „Test“ to which the standalone model generation functionality was applied on April 1 2007 8:00 am would be:

```
2007-04-01_0800_Test/main_model
2007-04-01_0800_Test/database
2007-04-01_0800_Test/database/...
```

In addition, when loading individual Substructures which were copied to the database directories these Substructures now use exactly the same Substitution Variable Sets as the main model.

Furthermore, since the directory is no longer named <MODELNAME>.data\_base, the original model will always use the original database references instead of the database entries that were copied to the standalone model directory. Of course the standalone model functionality still offers the options to automatically generate a compressed tar file and to include the results of this model.

## DIAGRAM SORTING VIA DRAG AND DROP

The SIMPACK PostProcessor was extended with a new feature for sorting and arranging Diagrams on a Page. Diagrams can now be moved between different Cells on one Page by simply dragging them with the mouse between Cells.

This feature also works for other Cell contents such as Text Frames and Bit-maps.

If the target Cell, to which the Diagram is dragged, is empty, then the Diagram is simply put into the new Cell. If the target Cell already has some content, then the content of the target Cell is swapped to the Cell from which the Diagram originated.

## NEW SIMPACK RAIL

Please see the article on the previous pages for more information on the new SIMPACK Rail.

## NEW MODELLING APPROACH FOR ROTATING FLEXIBLE BODIES

Please see the article on page 9 for more information.