

## New Features

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### CAE Portal Features

- **New LS-DYNA Output Portal** – The new LS-DYNA portal supports output extraction for responses existing in the following output files: abstat, bndout, deforc, d3hsp, eigout, elout, glstat, jntforc, matsum, nodfor, nodout, rbdout, reforc, rwforc, sbtout, secforc, and sleout. *Supported on all primary platforms. Compatible with versions 970 and 971 of LS-DYNA.*
- **Improved! Abaqus Output Portal** – The Abaqus Output Portal has been updated to support Abaqus v6.8, to perform value extraction faster, and to include all outputs available in the Abaqus odb file. *Supported on all primary platforms. Compatible with versions 6.6 through 6.8 of Abaqus.*
- **NX Output Portal** – Support has been added for more CAD output formats, including STEP 203, STEP 214 and Parasolid. *Supported on Windows x86-32 and Windows x86-64 only. Compatible with versions 4.0 through 6.0.*

### Direct Interface to the Microsoft Cluster Scheduler

HEEDS Professional's new interface to the Microsoft HPC cluster scheduler allows HEEDS to seamlessly setup, execute, and monitor jobs on the Microsoft HPC cluster. This interface can be used to perform one or multiple (user specified number) jobs simultaneously for a project, thereby providing a speedup of the design study being performed. The speedup factor is equal to the number of simultaneous evaluations that can be performed using the cluster.

### HEEDS Interface to Moldflow

HEEDS Professional can be integrated with Moldflow using a HEEDS/Moldflow interface file. The *HEEDS Professional with Moldflow* guide (available upon request) provides all the details required to use this interface. In this release, we have added support for modifying existing projects. The new version allows modification of all process parameters. *Supported on Windows x86-32 only.*

### Improved Multi-Processor Design (MPD) Performance

The MPD module has been improved to better utilize all available machines and reduce idle processors during a design study.

### New Ways to Define Distributions

Uniform and Normal distributions can now have their standard deviations defined either with an absolute value or as a percentage of the mean.

### Automatic Backup of Models from Previous Versions

HEEDS Professional 5.3 automatically generates a backup copy of any model created in a previous version of HEEDS.

### New Digital Data Filters for Response Definitions

Digital data filters have been added to allow you to remove the noise in your data and provide a smoother, more realistic output. The new filters include SAE 6487 (Butterworth 4-pole, phaseless, CFC filter) and Point Average.

## Known Issues

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This list covers the known issues with HEEDS Professional 5.3. Please read this section before reporting new bugs.

### All systems

- **HEEDS Professional does not support backward compatibility for Modeler projects created in versions prior to v5.1.**
- Abaqus portal issues
  - **Projects created in versions prior to 5.3 that use the Abaqus portal for tagging are not backward compatible.** HEEDS Professional 5.3 automatically creates a backup copy of the old project before creating a 5.3 version of the project, but Abaqus-related responses and variables must be retagged in the new project.
  - The Abaqus portal does not support named objects (i.e., parts, assemblies, sets, etc.) that use a single quote (') or comma (,).
- If you stop a run using a prior version of HEEDS Professional, and then install version 5.3, you will not be able to restart the run in the new version.

### Windows

- HEEDS MPD is supported on all platforms. HEEDS controlled evaluation queuing is supported on all platforms except Windows x86-64.

### Linux

- Certain buttons may not display text correctly in the Modeler. To resolve this issue, install the Microsoft TrueType fonts package "msttcorefonts", which can be found here: <http://www.yolinux.com/TUTORIALS/msttcorefonts-1.3-4.noarch.rpm>

Command to install: **rpm -ivh msttcorefonts-1.3-4.noarch.rpm**

This will work for both Red Hat and SUSE systems. Debian-based systems can get it through the following command: **apt-get install msttcorefonts**

After either the **rpm** or **apt-get** command is issued, you need to issue the following command (all systems): **fc -cache -f -v** or restart the machine.

## Supported Platforms

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HEEDS Professional 5.3 is primarily supported on Windows x86-32 and x86-64, and Linux x86-32 and x86-64. Secondary support is available for other platforms. Please contact us for a complete list.

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## Available Documentation

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- Installation guides for Windows and Linux
- *HEEDS Professional 5.3 User's Manual*
- *Getting Started with HEEDS Professional 5.3*