



Pointwise V16.00 R3 Release Notes

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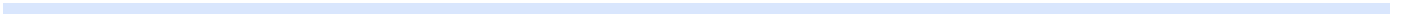
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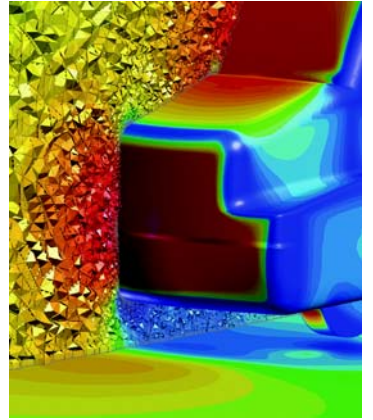
Release Notes

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Release Notes



1.2 Pointwise Release Notes

Overview

Pointwise is our new, next-generation of meshing software. It combines the meshing techniques developed over 23 years in Gridgen with a new graphical user interface that reduces the effort needed to create grids. Gridgen users will find that although the user interface is different, many of the underlying techniques are the same.

New Features

Although the GUI is the obvious new feature in Pointwise, several major new features have also been added. These new features include:

- Multi-level undo and redo with ability to revert to states stored in a history list. The number of undo levels is user configurable.
- Automatic assembly of connectors into domains. The selected connectors will be assembled into a domain or domains if possible.
- Automatic assembly of connectors, domains, or combinations of connectors and domains into blocks. The selected entities will be assembled into a block or blocks if possible.
- Support for 64-bit hardware.

Several other features in Pointwise are new relative to Gridgen.

- Support for VRML 2 files.
- Simultaneous transformation of grid and database entities.
- The ability to change the orientation of domains.
- Naming for all entity types.
- Improved CGNS support, including import.
- Shell intersections.
- DB curve drawing and connector drawing are now identical, including the ability to create multi-segment database curves.
- Native Mac/Intel port.

Graphical User Interface

Pointwise's GUI has replaced Gridgen's nested menus with a flat menu-driven interface that includes customizable toolbars for access to frequently used commands.

Pointwise uses a noun-verb interaction model. The entities to be operated on (nouns) are first picked, and then the action to be performed on them (verb) is selected. After the action is completed the entities remain selected so that further commands can be applied immediately.

Selection in Pointwise follows the standard Left Mouse Button (LMB) convention with the additional abilities to use **Ctrl**+LMB for additive selection and **Shift**+LMB for range selection.

Selection in Pointwise is heterogeneous; different types of entities can be selected simultaneously (e.g. both connectors and domains). Some commands operate on multiple entity types and some only operate on the selected entities that are of a particular type. Selected entities that are not applicable for the command are ignored.

Image manipulation in Pointwise is done by mouse movement in conjunction with:

Panning - **Ctrl** + Right Mouse button

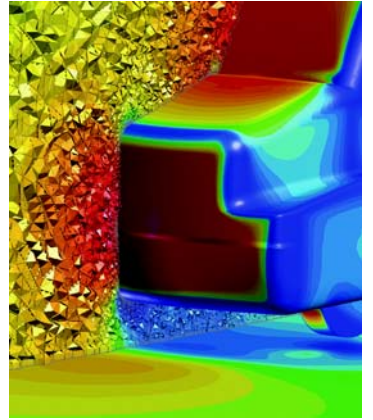
Zooming -Middle Mouse button

Rotating - **Shift** + Right Mouse button

Over the next several months additional capabilities will be added to Pointwise, both its GUI and the core meshing technologies, until it is ready to replace Gridgen.

1.4 Pointwise Release Notes

Resolved Issues



2.2 Pointwise Release Notes

Pointwise V16.00 Release 3

The below listing is provided as a reference for issues that have been fixed in the current version of Pointwise:

- SPR 9435** - The import of a Gridgen .dba file caused Pointwise to exit due to faulty trimmed surfaces.
 - SPR 9410** - The import of a Plot3D file failed due to the presence of a pole in the topology.
 - SPR 9381** - Connectors imported from a particular Gridgen restart file were not the correct shape.
 - SPR 9381** - Export of database entities to a Gridgen composite database file caused displacement of some entities.
 - SPR 9359** - Ansys CFX export was missing options for binary and single precision.
 - SPR 9349** - The solver and boundary conditions set in Gridgen restart files was not being imported into Pointwise.
 - SPR 9336** - Import of a Gridgen V15.06 restart file produced error messages as well as uncaught exceptions.
 - SPR 9316** - Export to Gridgen was causing an uncaught exception for a particular database and grid.
 - SPR 9301** - The Ctrl+D accelerator was unavailable in the Set BC panel.
 - SPR 9237** - Running the grid solver was causing points on a domain to pull off its associated database.
 - SPR 9231** - Exporting a grid to Gridgen from Pointwise caused some of the grids connectors to lose their database associativity.
 - SPR 9214** - Export of a certain grid to FV-UNS resulted in an incorrectly formatted FV-UNS file.
 - SPR 9199** - A problem was encountered with the tolerances used in hyperbolic extrusion of a block with an extremely small initial step size.
 - SPR 9197** - Exporting a Pointwise file to Gridgen caused an uncaught exception error.
 - SPR 9126** - A Gridgen restart file exported from Gridgen failed to import into Pointwise with its associated database composite file.
 - SPR 9108** - In the Quick Installation Guide, instructions for setting up a machine to access a distant license server were missing.
 - SPR 8770** - During import of a segment file, a problematic segment caused Pointwise to fail to import any segment from the file.
 - SPR 7771** - The error message that was appearing for expired license files needed clarification.
 - SPR 7676** - When performing prism extrusion for a particular grid, the resulting extrusion proceeded too slowly.
-