

GridPro v6.5

NEW IN GridPro v6.5:

GridPro v6.5 has a new tab called 'CAD' where the CAD geometries can be visualized and repaired for IGES and STEP formats.

List of new features:

1. Snapshot of the workspace and whole UI can be captured and saved in PNG or BMP formats.
2. Surface ids are displayed in the Settings and other surface related dialog boxes.
3. Assign property to a surface using 'Set property' option in the surface right click menu.
4. Surface information such as id, type, orientation and file name are displayed in the status bar.
5. Input the workplane values for scaling using 'Get workplane center' button.
6. Automatically create topology and internal surfaces for the pipes connecting two holes.
7. Save schedule file with user defined name after editing the 'Edit Grid Schedule' dialog box.
8. 'Kill and Restart' button is implemented for Ggrid dialog box.
9. Kill Ggrid process forcefully if it's running in background.
10. Save all the visible grid sheets as single quad file.
11. Create grid sheets using surface ids.
12. Create property file with surface ids as tagging for the surface sheets using 'Labels' button.
13. Add labels/tags for the property sheets.
14. Import hex format grid files.
15. Support for CFD++, SU2 tetra, US3D, OFLOW, Neptuno and new CFX solver format.
16. New tab for CAD geometry with features to view, repair and mesh the geometry.
17. UI displays more appropriate messages when the topology is invalid.

List of functions whose capabilities are improved/modified:

1. Decimal point precision can store up to 15 numbers.

2. File menu dialog box can be filtered based on file extensions.
3. Workplane z –axis is extended in negative direction for easy navigation.
4. Selection operations using mouse pointer has improved.
5. Options under Save, Delete and Frame buttons are grouped together.
6. Workplane closest is renamed to Closest(Workplane).
7. 1/10th of points option in surface display menu can display the points symmetrically.
8. Reload option is implemented for Surface right click menu.
9. Surfaces can be reloaded with other surface formats.
10. Surfaces are checked for disjoint pieces while loading.
11. Intersection of surfaces works for Plane and tria intersection.
12. Controlnet surface can replace the old file while creating and loading the surface, if the file names are same.
13. Surface parameters are updated in Copy, Reload and Settings dialog boxes while scrolling through the surfaces.
14. Wrapped corners are added to the active corner group.
15. Retaining the last used values for all dialog boxes in a session. It does not work across different sessions.
16. A warning popup message is shown when the same operation is executed twice simultaneously.
17. Surfaces created after using HEAL are written to separate folder 'temp_surfaces'.
18. Dump.tmp file is the default input file while restarting the Ggrid.
19. 'Clu' command generates conn file after clustering.
20. Longer grid names are shorten in the Show/Hide section for display purpose.
21. Slice button works only for CURRENT grid.
22. Reload button is renamed as Update.
23. Toggle buttons work independently in Grid and Property tab.
24. Surface ids are displayed for surface grid sheets (boundary grid sheets) in Show/Hide section.
25. New status messages are shown after a command is executed.
26. All, Current and Select buttons are enabled in Grid tab.
27. Acusim solver is renamed to Acusim/Acusolve.
28. FLUENT, OpenFOAM and SU2 converters are enhanced.

Bug fixes:

1. Fixed bug in Zoom where it does not zoom exactly to the selected region.
2. Fixed bug in updating the values entered in 'Settings' option under File menu.
3. Fixed bug in workplane Set option when Fix button is ON.
4. Fixed bug in displaying 2D linear surface.
5. Fixed bug in 'Align on surface' where corners are not projected correctly on to the surface.
6. Smoothing option is removed from 'Refine' button.
7. Fixed bug while reloading an Ellipse which was created in az.
8. Fixed bug in controlnet surface where it could not create an open surface, like cylinder.
9. Fixed bugs in Intersection of surfaces.
10. Fixed bug in cursor projection on screen for picking operations.
11. Fixed bug when clipping does not work while unzooming the screen.
12. Fixed bug in saving a file to another directory without extension.
13. Fixed bug in moving corners with small displacements.
14. Fixed crash while wrapping a corner group without corners.
15. Fixed bug in inserting sheets after wrapping corners with face exclusion.
16. Fixed bug in inserting sheets on a periodic topology.
17. Fixed bug in inserting sheets on a block-inside-block topology.
18. Fixed bug in Undo after wrap, rotation and mirror operation.
19. Fixed bug in wrap positioning if wrapped after using Remove→Edges.
20. Fixed bug in internal faces wrap where it changes the orientation of the 2sided surface.
21. Fixed bug where densities are not written correctly after executing periodic2regular.
22. Fixed crash while using periodic to regular option under Rotate→faces after executing Heal/Internal wrap.
23. Fixed crash while using Extrude Spherical option in reverse nest.
24. Fixed bugs in gridden.
25. Fixed crash when loading a grid while Ggrid is about to write.
26. Fixed bug where number of sweeps shows previous run count before starting Ggrid.
27. Fixed bug when Ggrid waits for loading a different grid and vice versa.
28. Fixed bug in Ggrid where killing one process kills all other Ggrid processes.

29. Fixed bug in grid leakage while running periodic topology.
30. Fixed bug in writing the conn file with surface labels.
31. Fixed bug in saving the grid file with *.grd extension.
32. Fixed bug in Show/Hide Grid section.
33. Fixed bug in displaying the name when binary grids are loaded.
34. Fixed bug in mildclu where it could not read the corrupted file.
35. Fixed bug in Update grid button where it updates the grid with missing faces.
36. Fixed bug where 'Spacing' highlight is also switched OFF when grid blocks are hidden.
37. Fixed bugs in trimming grid sheets and blocks.
38. Fixed bug in 'Align to grid' on 2D topologies where it does not sync the corners correctly with the grid blocks.
39. Fixed bug where grid blocks switched ON when solver format is changed.
40. Fixed bug where grid blocks are automatically switched ON while reloading the grid.
41. Fixed bug where grid blocks are automatically switched ON when the Slice button is switched OFF.
42. Fixed crash while using Hex2mb on larger grids.
43. Fixed bug in weld utility.
44. Fixed bug related to integer overflow.
45. Fixed bug in toggling 3D properties.
46. Fixed bug in Properties section.
47. Fixed bug in updating the name of the selected property sheet using right click → Set Property option.
48. Fixed crash while exporting a grid to OpenFOAM with surface labels.
49. Fixed bug in outputting a warning message whenever a file name is overwritten in the working directory.