Changes to FRANC3D from Version 7.2 to 7.3

Dec 5, 2018

1) Updates and bug fixes to geometric search tree algorithm.
2) Add RBE2 data type for Nastran and fix mapping of RBE/MPC data on remeshed surfaces.
3) Add surface temperature mapping for surface temperature boundary conditions.
4) Skip output of *Dload (omega) data for Abaqus for CFT (crack face traction) load step.
5) Set correct default global coordinate system ID for Ansys output.
6) Fix various issue with output of Nastran loads and constraints.
7) Add PRCINT to Ansys output when J-intergral is turned on.
8) Add T-series element output for Abaqus.
9) Carry crack face contact settings forward for FRANC3D restarts.
10) Add code to allow user to turn on "Do not coarsen more than uncracked mesh".
11) Add more error checking and exceptions.
12) Fix Nastran temperature setting for CFT load step.
13) Fix command line interface for crack front fitting options – specifically for multiple poly.
14) Catch several potential crashes in the load step map if the user enters incorrect data in the growth model.
15) Made geometric search tolerance more consistent for crack front fitting/extrapolation.
16) Fix issue displaying Jintegral and Tstress data in the SIF display dialog.
17) Modified the SIF path options to allow users to select the start and end of the path.
18) Modified the crack insertion dialog to define a local coordinate system and allow the crack to be positioned using the local system.
19) Add curvilinear elliptical crack to flaw library.
20) Add "from KIII" for defining the sign of K_equiv.
21) Fretting module display updates and optimizations.
22) Several display issues fixed – for example when turning on / off surface mesh.
23) Fix slow display of graphics windows in MS Windows.
24) Version number, build number and date, and documentation updated.