

Changes to FRANC3D from Version 7.0.9 to 7.1

Dec 1, 2017

- 1) Added Display menu, which includes View Response and Create Animation.
View Response was moved from the Advanced menu.
Create Animation was developed starting from the stand-alone GrowthSequence program, which is no longer distributed.
- 2) A Capture button was added to the main Window to provide .png or .jpg images of the current model.
- 3) Fatigue crack growth dialogs have been revised to allow time or cycle or combined time+cycle dependent crack growth. Multiple load steps and load substeps are supported.
- 4) View/Edit Growth Parameters button was added to the Fatigue menu to allow a user to edit the fatigue growth model parameters.
- 5) User-defined Python functions for crack growth are now supported. A Read User Extensions menu button was added to the Advanced menu.
- 6) The VCCT (virtual crack closure technique) was added for computing SIFs. This is intended primarily for bi-material interface cracks, which will be supported in the next release (Ver 7.2). VCCT works for isotropic and anisotropic materials.
- 7) Displacement Correlation SIFs for orthotropic materials is now supported.
- 8) A Large Rotations check box was added for the M-integral SIFs for analyses with large rigid body motions, such as rotating gears.
- 9) The Fretting module interface was modified to support multiple load step analyses.
- 10) Documentation and tutorial example files have been updated.