LUSAS 16.0 Error Fix and Modification Release Note

This document details changes that have been made since the release of LUSAS 16.0-0

Further details of errors that have been fixed can be found in the Knowledge Base on the LUSAS Web site www.lusas.com where the number given in brackets is the reference number in the Knowledge Base. The changes apply to all LUSAS application products unless otherwise stated.

For new features see New Features in 16.0
For details of errors fixed in Modeller 16.0 see modeller fixed 16.0
For details of errors fixed in Solver 16.0 see solver fixed 16.0

Version 16.0-2 Built 10 April 2018

Change Requests

LUSAS Modeller 16.0-2 (28339)

LPI Help entry missing from start menu (22748)
Uninstalling the x64 version removes the shortcut for the config tool (22916)
Configuration Utility dialog does not appear after installing 64 bit LUSAS (23167)
"Error opening error log file" message can appear unless LUSAS started with admin rights - (23185)
Pardiso Solver only available for user that installed LUSAS (23561)
Silent installation does not pass on graphics and licence details (23584)
Rail Track Analysis User Manual not up to date (21408)
Crash when deleting VLO run (22658)
Droplists in Moving Load generator are too long to fit on dialog (22668)
Fibre locations added to a multiple varying cross section are discarded (22775)
Enter key does not "OK" properties boxes (22786)
Inspection locations incorrectly offered in values layer when internal displacements for beams switched off (22790)
Lift-off support stiffness wrong when using release all restraints option (22846)
Cannot set loadcase to change the slideline type (22884)
The Mass item on the Rigidities material attribute should actually be labelled as density (22896)

Mesh pattern changes when joints are assigned (cannot assign joints between surfaces) (22905)

Entering section coordinates for cross-section beams yields error about centre of mass not being at centriod (22911)

When a local coordinate system is applied to a surface, the visualisation of discrete patch load that acts on the surface does not correspond to the direction in which the load is actually applied (22912)

Cannot export volume mesh to dxf (22930)

Apply button on Material Library does not work when editing (22938)

Crash after undo of modification of compound vehicle load (22941)

Feature max (or min) of a nodal result (e.g. Displacement) can miss the maxima (or minima) in a surface model (22962)

Sometimes surface axes (and therefore some assigned attributes) visualised in opposite direction (22968)

VLO error: The influence could not be solved. The influence file cannot be created because the topology of the search area cannot be determined. (22976)

Inappropriate warning/error message about slab design when using scripted results (22978)

Vectors of reactions are missing at some supported nodes (22986)

Modeller tabulates origin centred hysteresis incorrectly, which may result in wrong solutions if the mass distribution is important. (22991)

The slice resultants beams/shells facility complains about nonlinear materials when none exist in the model (23016)

After the "internal displacements" option has been chosen, displacements in the middle of a beam should be available in PRW and values drawing layer, (23019)

Print files incorrectly use commas as decimal separator in European locales (23021)

Prestress wizard using unreasonable amount of memory (23029)

Results cache does not work for beam/shell slicing results (23047)

Prestress loading incorrect for tapered sections (23054)

Entering the Railtrack 'Apply Rail Loads' dialog with a different Modeller session does not always set up the correct current working folder for the modelling (23064)

Segmental Bridge example vbs scipt does not include material age and therefore does not run correctly (23085)
When using BD86/11 in VLO, if the if the "From Table 5.1" option is being used and the carriageway width is over 22m, no error message is displayed and the dialog cannot be closed (23086)
Crash when merging two specific models (23127)
"No such results files" error when solving model with prestress analysis (23159)
Window rulers scaling incorrectly when attached to additional screen such as projector (23168)
Beam/shell slicing max/min location in contour summary incorrect (23178)
Inappropriate "Visualise" item in loading context menu (23183)
Spurious message "Invalid option entered. Valid options are : dz, thx, thy, rslt, all" when enveloping on RC Design (23233)
Modeler hangs while modifying compound discrete load (23299)
Changing the factor in a basic combination is sometimes ignored (23342)
Beam orientation method incorrectly set to "using vertical axis" when pre-V16 model is opened and subsequently saved with V16 (23345)
Envelope of Wood armer very slow (23400)
Mixing influence with inspection locations OR graph through 2d OR beam/shell slicing can lead to a model file being saved with invalid format (23456)
Prestress: Some attribute data (e.g. Age) may be incorrectly identified as missing, or incorrectly retrieved from wrong loadcase (23488)

LUSAS Solver 16.0-2 (6287)

If all eigenvalues within a frequency range are requested for a model that has BTS3 elements, the analysis fails with system errors (22957)
For joint material models with hysteresis and reduced stiffness, primary unloading from the backbone can erroneously return to a position on the wrong side of the origin. (23028)
If a linear buckling analysis is to be carried out at the end of a step by step nonlinear analysis, and 2D or 3D thick beam elements exist in the model, and co-rotational GNL has not been specified, the analysis will fail to converge on the first increment. (23222)

Version 16.0-1 Built 14th November 2017

Change Requests

LUSAS Modeller 16.0-1 (27602)

Tool for installing network licence does not run on XP (22920)
Improve error messages when installation downloads are corrupted or fail (22931)
Useful to get a table of components (like print results wizard) along the slice used to create a graph (3665)
Incorrect display of deformed mesh when translational end release is defined (18747)
TLO DMI: Cannot determine a plane for element xxx. Please check the search area. (22739)
Wrong transformation used when creating DMI attribute - "local" is used, whatever is chosen on dialog (22758)
Should be possible to set active a time step by drag and drop (22760)
It should not be possible to delete a reference path that is used in a DMI analysis (22768)
Wrong components offered for initial stress and strain load for warping beam (22770)
Diagrams unavailable when using primary component "Displacement" (specified when envelope set active) (22781)
Double click on a graph utility should edit, not view results (for consistency) (22782)
Arbitrary Section Property Calculator hangs for a particular model (22797)
Amplification factor (in window summary annotation) should be based on absolute value of eigenvalue load factor (22802)
Axes and Arrow size entry does not support decimal points (22813)
Unable to plot graph through 2d of any principal stress component (Smax, Smin, S1, etc) (22816)
Autoloader unable to find license key (22839)
Crash when running TLO for design code AS5100-7:2004 (Austroads) when specifying the number of lanes (22841)
When changing vehicle class, the India Vehicle Load wheel configuration picture remains as previously selected and does not match generated load (22860)
SAP2000 file (s2k) import doesn't work for a particular file (22863)
TLO BD86/11: SV vehicles may incorrectly include HA loading (22872)

Units of slope of hardening gradient are not correct (22876)
IMDPlus fails to find USB license (22879)
Multi tendon prestress wizard crashes when using tendon definitions imported from MIDAS (22892)

LUSAS Solver 16.0-1 (6207)

The stress resultants for x-section warping beams (BMX21W) are being displayed as zero when diagrams/values are displayed. The resultant warping beams (BMI21W) work correctly. (22807)