CopyLoads.vbs

Description

Load assignments can be copied in LUSAS by holding down the 'Ctrl' key whilst dragging a load or load folder in the loadcase treeview from one loadcase to another.

However, because each load attribute may potentially be assigned to individual geometric features (e.g. line, surface etc.) with different properties (e.g. load factor, discrete load divisions etc.), the above method copies the load assignment separately for each individual assignment feature. As such, for load attributes that are assigned to many features (e.g. gravity assigned to all lines, surfaces, volumes in a model) this copy method can be very time-consuming.

In many cases, structural loads are assigned with the default assignment properties (i.e. load factor of 1.0 etc.) and it is not really necessary to cycle through each individual feature assignment separately. If this is the case then the following script can be used. This script simply reassigns the selected loads to all chosen loadcases using the default load assignment properties.

To use this script:

1. Set the loadcase active which contains your chosen load assignments
2. Click 'File->Script->Run Script' and select the script file "CopyLoads.vbs". Click OK.
   a. Enter the Load Attribute ID numbers of the loads that you wish to assign to other loadcases (e.g. 1,2,4,7 etc). Or simply enter 'All' for all loads in that loadcase. Click OK
   b. Enter the First loadcase ID number you wish to assign the load to. Click OK
   c. Enter the Last loadcase ID number you wish to assign the load to. Click OK
   d. Enter the desired increment between successive loadcases in the specified range (e.g. enter "2" if you want to assign to every other loadcase"). Click OK

Notes

1. THIS SCRIPT IS NOT PART OF LUSAS SOFTWARE AND AS SUCH IS NOT QUALITY APPROVED OR SUPPORTED. IT IS PROVIDED ON AN AS IS BASIS FOR DEMONSTRATION PURPOSES ONLY.

2. This script will not copy load factors associated with the load assignments. i.e. ALL COPIED LOAD ASSIGNMENTS WILL BE ASSIGNED WITH A LOAD FACTOR OF 1.0

3. Discrete loads cannot be copied using this script since their individual assignments include many other specific assignment properties

4. It is important to thoroughly check your loadcase assignments after using this script. It is very easy to accidently assign loads multiple times by running the script more than once (no warning will be given).

5. The 'Report generator' can be useful for checking load assignments for groups of geometry. You can also check assignments for individual features by selecting a single point, line, surface or volume, right clicking and selecting properties and then clicking the 'loading' tab in the properties dialog.

6. It is also beneficial to check total reactions using the 'Utilities->Print Results Wizard' to ensure that these match the expected total applied loads in each global direction