

Knowledge Base

Information

QA Article:QA00000008773e

Last Update Date:09.09.2020

Rating:4.0

Views:301



Plug-in utility to set an offset for node and element labels

Portfolio / Domain:SIMULIA Abaqus Unified FEA / SIMULIA Abaqus Unified FEA

Product:n/a

QUESTION

I would like to apply an offset to the node and element labels in my model. Is this possible?

ANSWER

In Abaqus/CAE 6.10 and higher, global control of node and element numbering is available as native functionality.
(The following applies to releases 6.5 to 6.9)

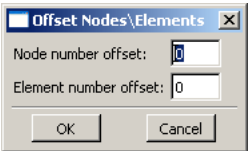
A plug-in utility has been written for this task and is attached below. It allows you to specify an offset for the node and element numbers in your model. For example, if an offset of 100 is specified for the node labels, the first node will have a label of 101.

To install the plug-in, save the attached files to one of the following directories:

- `abaqus_dir\abaqus_plugins` where `abaqus_dir` is the Abaqus parent directory
- `home_dir\abaqus_plugins` where `home_dir` is your home directory
- `current_dir\abaqus_plugins` where `current_dir` is the current directory

Note that if the `abaqus_plugins` directory does not exist in the desired path, it must be created.

The next time Abaqus/CAE is launched, the plug-in will be available from all modules except Sketch and Visualization. Select **Plug-ins > Tools > Offset Nodes/Elements...** to receive the following dialog:



Enter the desired offset for the node and/or element numbers and select **OK**.

Usage Notes

- The plug-in will automatically cause the input file to be written in a flattened format; that is, the parts and assemblies format will not be used.
- The new, offset node and element labels are only visible in the input file. If node and/or element labels are displayed after the mesh is created, they will not reflect the offset to the labels.
- The value of the offset must be greater than or equal to zero. If the offset is zero, the corresponding label will begin at 1.
- The plug-in may be used before or after the mesh is created.
- When the plug-in is used, a message is printed to the Abaqus/CAE message area stating the starting value of the labels for the nodes and elements.

Disclaimer

The attachments on this article are subject to certain usage conditions. Please [click here](#) for details.

KEYWORDS

plug-in, plugin, python, scripting, customization, 3140

ATTACHMENT

- neOffset.py
- neOffset_plugin.py
- Answer_3140_Figure1.png

SUBSCRIBE TO CHANGES

☐

RATING

On a scale of 1-5, how would you rate the technical content of the article?

Please rate this article...

LET US KNOW
IF THIS ARTICLE
NEEDS TO BE
ENHANCED

UNCLEAR

MISSING INFO

DUPLICATE

OUT OF DATE

ERROR DETECTED

[See Comments \(1\)](#)

