Knowledge Base

Abaqus/CAE plug-in utility to change curve refinement setting for all parts in a model

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

QUESTION

Is there any way in Abaqus/CAE to set a curve refinement setting to all the parts in the model?

ANSWER

(The following applies to Abaqus/CAE 6.7 and higher)

An Abaqus/CAE plug-in application for this purpose is attached below. The plug-in can be used to set the curve refinement setting of all the parts in the current model.

Installation

To install the plug-in, save the attached archive file 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

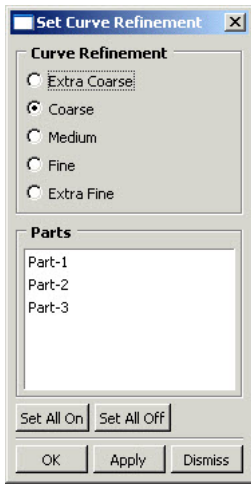*current_dir*\abaqus_plugins where *current_dir* is the current directory

Note that if the abaqus_plugins directory does not exist in the desired path, it must be created. The *plugin_dir* directory can also be used, where *plugin_dir* is a directory specified in the abaqus_v6.env file by the environment variable **plugin_central_dir**. You can store plug-ins in a central location that can be accessed by all users at your site if the directory to which **plugin_central_dir** refers is mounted on a file system that all users can access. For example,

    plugin_central_dir = r'\\fileServer\sharedDirectory'

On Windows platforms, right click on the archive file and select **WinZip → Extract to here**. On Linux platforms, type **unzip SetCurveRefinement.zip** at the command prompt. A file named curveRefinement_plugin.py and a folder named curveRefinement will be extracted. Note that the plug-in will not function properly if this procedure is not followed.
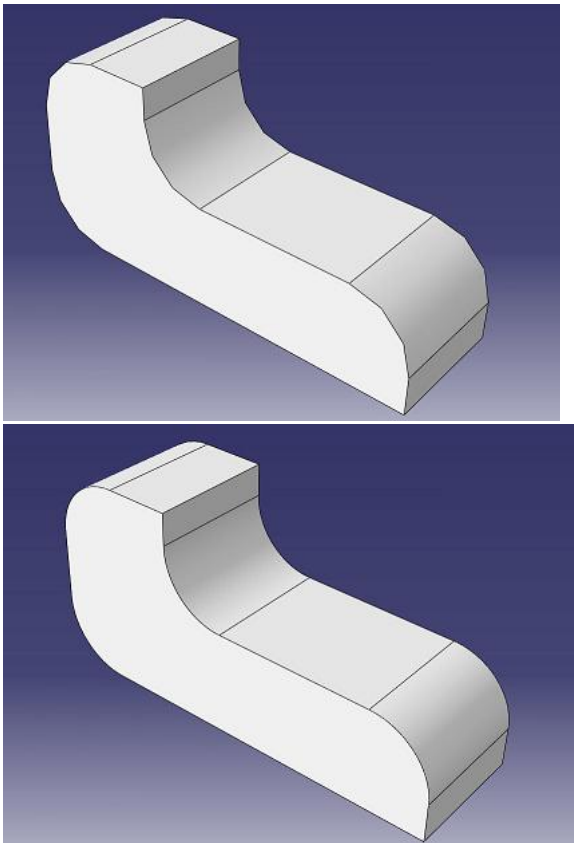
Usage

1. From the **Part** or **Assembly** modules, select **Plug-ins → Tools → Set Curve Refinement** to open the following dialog:

   The plug-in will automatically list all the parts in the current model.

2. Select the parts for which you wish to apply a particular curve refinement.

3. In the **Curve Refinement** panel, select the desired refinement setting.

4. Select **OK** or **Apply** to apply the curve refinement setting. The figure below shows the curve refinement for a particular part after being changed from "Extra Coarse" to "Extra Fine".

5. The **Set All On** and **Set All Off** buttons can be used for selecting or deselecting all the listed parts.

Disclaimer

The attachments to this article are subject to certain usage conditions. Please click here for details.

Revision History

12 Dec 09	Release 1.1-1
09 Mar 11	Release 1.1-2. Add assembly regeneration.

KEYWORDS   plug-in, plugin, 4338

ATTACHMENT   answer_4338_fig2.jpg   answer_4338_fig1.jpg   answer_4338_fig3.jpg   SetCurveRefinement.zip

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