Knowledge Base

Abaqus/CAE plug-in to plot multiple paths in the Visualization module

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

QUESTION

How can I plot multiple paths in Abaqus/Viewer?

ANSWER

(The following applies to Abaqus 6.9 and higher.)

Abaqus/Viewer can generate paths based on several sources. Individual paths can be displayed in a viewport using the **Plot** menu. The attached utility allows for multiple paths to be plotted at once.

Installation and Usage

To install the plug-in, save the attached archive file plotMultiPaths.zip 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 plotMultiPaths.zip** at the command prompt. Folders named abq_PlotMultiPaths and a file named plotMultiPaths_plugin.py will be extracted. Note that the plug-in will not function properly if this procedure is not followed.

Usage

The plug-in is launched from the **Visualization** module only. Select **Plug-ins → Tools → Plot Paths...** to open the following dialog:

Session paths will be listed in the **Names** list. To plot one or more paths, select them and click on **Plot**.This utility will create session annotations. If you need to remove or re-plot paths, we recommend deleting the existing paths using the **Delete** button.

Options

Select **Plot names** to add the name of the path object to the start and end string that appears near the path in the viewport.

Select **Plot end markers** to plot hollow circles for in-between points. The **Start** and **End** points will still be solid circles.

Select **Use unique colors** to plot each path with a unique color (up to 50).

Enter a value in **Font size** to change the size of the fonts.

Enter a string next to **Filter:** to filter the path names. Regular expression search is used to filter names. Use **Tip...** for more details.

Notes

The utility works only when an output database (.odb) is displayed in the current viewport.

Some element and path types are not yet supported. An error message will appear in the command line interface (CLI) when a path cannot be plotted.

Disclaimer

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

Revision History

20 Sep 10	Release 1.1-1

KEYWORDS   plug-in, plugin, display, image, picture, one, multiple, 4579

ATTACHMENT   answer_4579_fig1.png   plotMultiPaths.zip

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