

Knowledge Base

Information



Abaqus/CAE Plug-in to Color Parallel Domains Created by Abaqus/Explicit

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QUESTION

I would like to quickly visualize the domains created by an Abaqus/Explicit analysis that used domain-level parallel execution. Is there a utility to accomplish this?

ANSWER

(The following applies to all releases.)

An Abaqus/Viewer plug-in for this purpose is attached below. The plug-in uniquely colors each parallel domain created during the analysis.

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 files and select **WinZip** → **Extract to here**. On Linux platforms, type **unzip colorDomain.zip** at the command prompt. Files named colorDomain.py and a file named colorDomain_plugin.py will be extracted.

Note that the plug-in will not function properly if this procedure is not followed.

Usage

In Abaqus/Viewer or the Visualization module of Abaqus/CAE, load an output database (.odb) into the current viewport. Select **Plug-ins** → **Visualization** → **Color Domain...**

In a domain-level parallel run, internal element and node sets for each domain are created; they follow the naming pattern domain_n. The utility iterates through these sets and randomly selects a color for each domain.

Disclaimer

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

Revision History

05 May 09	Release 1.1-1
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KEYWORDS

plug-in, plugin, domain, color, visualize, parallel, decompose, 4154

ATTACHMENT

[colorDomain.zip](#)

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