

DADiSP / MAT File

MATLAB File Import Module

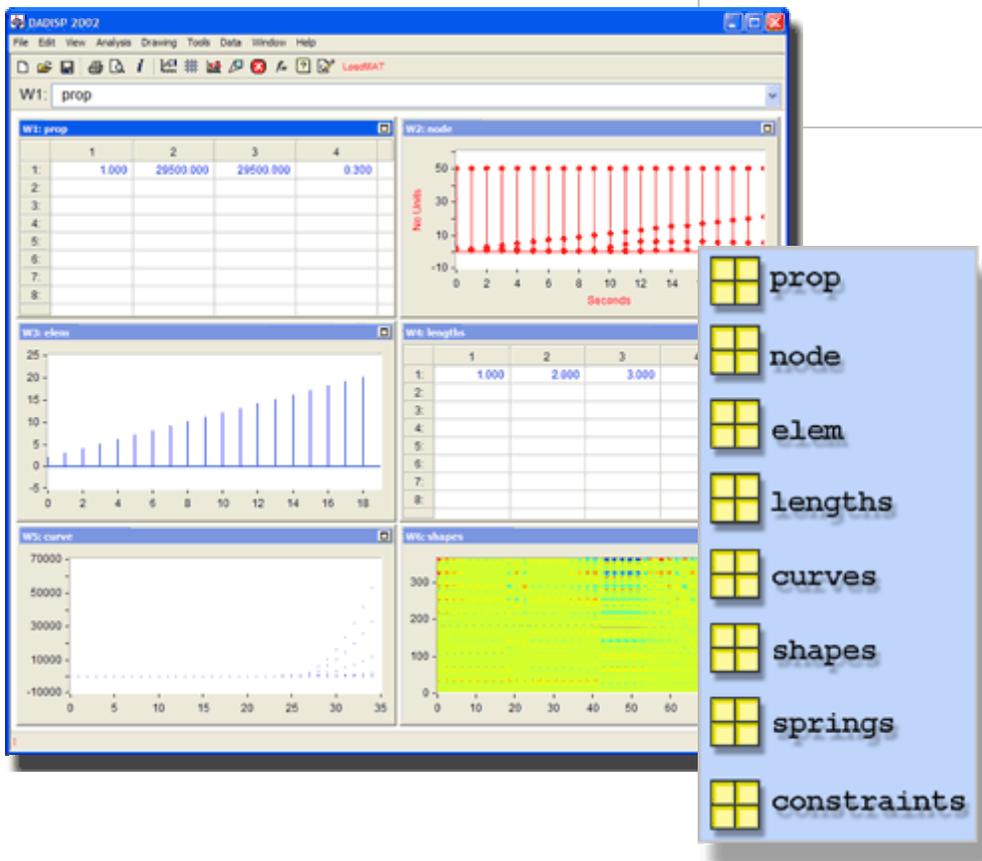
DADiSP/MAT File is a simple dialog based module designed to easily import data files saved in the MAT file format created by MATLAB (1) and similar programs. MAT files Version 4.0 and higher are supported.

MAT files can be of any size and contain any number of variables. The entire contents of the file can be imported or a subset of specific variables can be selected. Array variables are optionally plotted automatically.

(1) MATLAB is a registered trademark of The MathWorks, Inc.

KEY FEATURES

- Simple Dialog Box User Interface
- Loads Version 4.0 MAT Files and Higher
- Handles both Real and Complex Arrays
- 1x1 Arrays Imported as Scalars
- Supports String Variables
- Loads Structures and Cells as Global Variables
- Automatic Plotting of Array Variables
- Does Not Require MATLAB

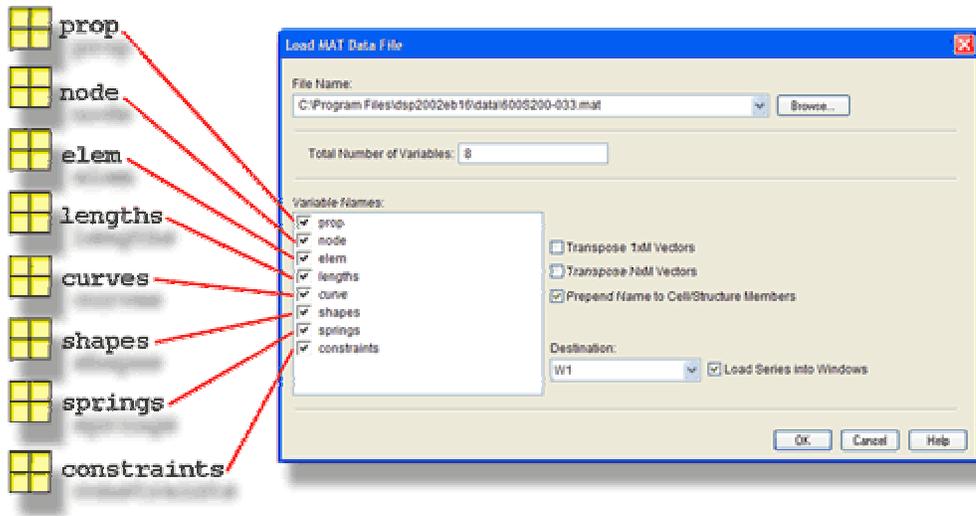


MATLAB MAT File Import Module

A MAT file is a binary data file format created by MATLAB and similar programs. MAT files can contain any number of program variables produced by a MATLAB interactive session or automated script. These variables represent several MATLAB data types including strings, arrays, cells and structures.

Simple Interface

Importing a MAT file is as simple as pressing a button and selecting the file. After a file is chosen, a list of the contained variables is displayed. The entire contents of the file can be imported or a smaller subset of specific variables can be selected. Arrays can be imported "as is" or transposed on the fly to take advantage of DADiSP's optimized column orientation.



MAT File Formats

Although most MAT files are often identified by the .MAT file extension, a variety of differing internal formats exist depending on the version of MATLAB that produced a particular file. Rather than deciphering each format directly, DADiSP/MAT File relies on MATLAB's own MAT DLL library to isolate format details and eliminate file incompatibilities. As a consequence, all MAT files from Version 4.0 and higher are supported and MATLAB itself is *not required*.

Data Type Support

A MAT file variable is imported into DADiSP as a global variable with the same name and data type as the original. Real and complex arrays are supported. 1x1 arrays are returned as scalars. Members of cell and structure variables are imported as individual global variables prefixed with the original cell or structure name. String variables are also supported.

Requirements

DADiSP/MAT File requires DADiSP 6.0 B16 or higher. MATLAB is not required. Contact us for information about updating your current version of DADiSP.

MAT File Functions

DADiSP/MAT File is a fully menu driven module. However, the following functions can be used on a standalone basis to read MAT files.

MAT File Functions

- guimat Displays the dialog box interface to read MAT files.
- loadmat Load selected variables from a MAT file.
- matinfo Returns the number of variables and variable names in a MAT file.