

# NAG Library

## Online Documentation

### 1 Introduction

The complete NAG Library Manual, Mark 25 can be viewed online in the following formats:

**HTML**, a fully linked version of the manual using HTML, SVG and MathML (recommended for browsing) and providing links to the PDF version of each document (recommended for printing);

**PDF**, a full PDF manual browsed using the PDF bookmarks, or via HTML index files;

**Single file PDF**, the manual as a single PDF file;

**Windows HTML help**, Windows HTML help version as a single file.

The two single file formats are more compact than the formats that use one file per routine and, for example, allow text searches across the entire manual, but of course the larger files may not be so convenient if you only need to view the documentation for a few routines.

This note tells you how to obtain the software required to view the documentation and advises you how best to navigate the files with or without a browser.

### 2 HTML Format

#### 2.1 Viewing HTML5 Files

These files do not use any proprietary browser specific features, and conform to relevant W3C Recommendations (or Draft Recommendation in the case of HTML5) (HTML, MathML, SVG, CSS).

Support for these languages may require that your browser be updated and/or the installation of additional fonts. This document is restricted to providing information for the more widely used browsers. If you require information for additional browsers please contact NAG.

Note that HTML5 is still officially at draft stage in the W3C process, however it is implemented in the current versions of all major browsers (Internet Explorer, Firefox, Chrome, Safari and Opera all parse documents according to the HTML5 specification). The MathJax javascript library is used to provide MathML support for those browsers without built in MathML rendering.

#### 2.2 Firefox (and other Mozilla based browsers)

Versions of Firefox from Firefox 4 onwards should display MathML in HTML files by default.

Rendering of the mathematics is improved if you install the STIX or other opentype math fonts if they are not already included on your system (as is the case with OS X and some Linux distributions). Full details of the installers available for these fonts on all the major platforms are included in the Firefox MathML fonts page:

<http://www.mozilla.org/projects/mathml/fonts/>

#### 2.3 Other Browsers

If Firefox is not being used, then the javascript on the page loads the MathJax javascript library ( <http://www.mathjax.org>) to enable MathML rendering. By default this is loaded from the web using the MathJax Content Distribution Network. If you require the documentation to work without an Internet connection then you may either use Firefox as described in the previous section or you may download a local copy of MathJax ( <http://docs.mathjax.org/en/latest/installation.html>) which needs to be unpacked on to your local files server or file system, and then edit the file `../styles/nagmathml.js` changing the line `http://cdn.mathjax.org/mathjax/latest/` to refer to your local installation.

### 3 Navigating HTML5 Files

A main index file has been provided ([html/frontmatter/manconts.html](http://html/frontmatter/manconts.html)) which links to individual Chapter Contents documents, which in turn link to a complete set of HTML files. Use your browser to navigate from this main index file. For each routine document in HTML format you are provided with a link to its equivalent PDF file, this file has been provided primarily for printing purposes.

Each library document contains a number of hyperlinks to particular elements, e.g., argument, sections, chapter contents, etc. The following key identifies the colour used for each element:

<b>CSS colour</b>	<b>CSS name</b>
black	NAG type
green	appendix, chap, chapter introduction, decision tree, general introduction, section
grey	withdrawn document
pale blue	equation, figure, item in a list, note, bibliographic reference, table, url, verbatim item, website
navy blue	ifail value
red	parameter name
pink	member
purple	optional parameter
royal blue	html table of contents, example plot, routine document, link to a routine example from a table of contents

### 4 Printing HTML5 Files

It is possible to print your HTML5 files from the browser, however support for printing from browsers, especially support for printing mathematics, varies considerably between versions of browsers and platforms and printer drivers in use. You are recommended to use the PDF version of the document for printing and suitable links are provided at the top and bottom of the HTML document.

### 5 Windows HTML Help

The Windows HTML Help version of the manual is essentially a compressed version of the HTML5 help, customised for the Windows HTML Help viewer (with a bundled copy of MathJax). This format can be very convenient as it is a small compressed single file version allowing full text search over the entire library. You may find this useful if you have a Microsoft Windows desktop, even if you have the NAG Library installed on a different platform.

## 6 PDF Format

### 6.1 Viewing and Printing PDF Files

If you do not already have a copy of Adobe Acrobat Reader, a free copy can be downloaded from <http://www.adobe.com/reader>. Please check this site for availability of a reader for your platform. While we recommend the use of Acrobat Reader, there are alternative PDF viewers available which can also be used, such as xpdf or ghostview.

If Acrobat is not running as a plug-in then the bookmark links will not work correctly if you are browsing the PDF files via http rather than the local filesystem. You are advised to reinstall Adobe Acrobat which should rectify the problem.

We recommend that you use the PDF format when printing library documentation.

### 6.2 Navigating the PDF Files

The manual is supplied as a set of individual PDF files, one for each routine document, chapter introduction, etc.. Each PDF file contains bookmarks that can be used to navigate between the files. Alternatively, and often more conveniently, HTML tables of contents are supplied which allow you to navigate to the desired file using a browser, and then using Acrobat as a browser plugin to read or print the document.

Alternatively the single file version of the PDF may be used. In this case the bookmarks will provide links to every routine in the Library, and text search may be used to search the entire Library contents.

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