NAG Library

Online Documentation

1 Introduction

The complete NAG Library Manual, Mark 24 can be viewed online in the following formats:

HTML5, a fully linked version of the manual using HTML 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 HTML5 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) (HTML5, MathML 3.0, CSS 2.1).

Support for these languages may require that your browser be updated and/or the installation of a (free) third party extension. 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 acording to the HTML5 specification). This documentation format does not include any HTML5 features other than MathML, so should work in older browsers (as Javascript is included to enable MathML support in most popular browsers).

2.2 Internet Explorer

Internet Explorer version 6.0 or later is required.

If you have a suitable version of Internet Explorer installed we recommend that you obtain the free MathPlayer plugin from Design Science in order to render the MathML expressions.

The latest version is available for download from:
http://www.dessci.com/en/products/mathplayer/download.htm

Internet Explorer 9 or later parses the MathML as specified by HTML5, the included JavaScript makes adjustments required for earlier versions of Internet Explorer. If MathPlayer is not installed, the JavaScript will detect this and attempt to use CSS rendering as for Opera, this will work better in version 8 and later than earlier versions, however MathPlayer is recommended for all versions of Internet Explorer.

2.3 Firefox (and other Mozilla based browsers)

Versions of Firefox from Firefox 4 onwards should display MathML in HTML files by default. JavaScript is included that enables this rendering in earlier versions of Firefox (using the MathML rendering that has always been available in Firefox's XHTML support).

You may need to install additional fonts (if so, a dialog box will alert you when you first view a page containing mathematics).

For Firefox 4 onwards you need the STIX fonts, for Firefox 3, you need the STIX beta fonts, and for earlier versions you need the TeX fonts. 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/

2.4 Safari and Chrome

Versions of Safari from 5.1 onwards and Chrome from 24 onwards should display MathML in HTML files by default. JavaScript is included that should detect earlier versions and enable rendering using CSS as for Opera.

2.5 Opera and other browsers

Opera does not have native MathML support however their CSS styling will allow most of the MathML to be rendered legibly but without the finer typographical refinements of browsers with full MathML support. The JavaScript used with the documentation will detect Opera and other browsers and explicitly apply a suitable CSS styling.

3 Navigating HTML5 Files

A main index file has been provided (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:

CSS colour	**CSS name**
black	nagtype
green	appendix, chap, chapint, dtree, genint, sec
grey	wdrn
pale blue	eqn, fig, item, note, ref, table, url, verbatimref, website
navy blue	ifail
red	arg
pink	member
purple	optparam
royal blue	htmltoc, plot, rout, tocexample

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 (and requiring MathPlayer, as it uses the same underlying HTML rendering as Internet Explorer). 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.
