

NAG Library

Online Documentation

1 Introduction

The complete NAG Library Manual, Mark 23 can be viewed online in the following formats:

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

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 on how best to navigate the files with or without a browser.

2 XHTML+MathML Format

2.1 Viewing XHTML+MathML Files

These files do not use any proprietary browser specific features, and conform to relevant W3C Recommendations (Standards) (XHTML 1.0, MathML 2.0, CSS 2.1, XSL 1.0).

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.

2.1.1 Internet Explorer

Internet Explorer version 6.0 or later is required.

If you have Internet Explorer (version 6 onwards) 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>

2.1.2 Firefox (and other Mozilla based browsers)

All versions of Firefox should display XHTML+MathML files by default. MathML support is part of the core rendering engine in this browser.

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 3, you need the STIX 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/>

2.1.3 Opera, Chrome and Safari

Opera, Chrome and Safari do not have native MathML support however they do have very modern and compliant CSS engines which allow most of the MathML to be rendered legibly but without the finer typographical refinements. The stylesheet used with the documentation will detect these browsers and automatically apply a suitable CSS styling.

2.2 Navigating XHTML+MathML Files

A main index file has been provided (xhtml/FrontMatter/manconts.xml) which links to individual Chapter Contents documents, which in turn link to a complete set of XHTML files. Use your browser to navigate from this main index file. For each routine document in XHTML 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

2.3 Printing XHTML+MathML Files

It is possible to print your XHTML+MathML 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 links are provided at the top and bottom of the XHTML document.

2.4 HTML5

At the time of writing, a new version of HTML is being developed, HTML5, which plans to allow the use of MathML directly in HTML pages (rather than distributing the documentation as XML). This format is already implemented in test versions of (for example) Firefox, but is not currently available for general use. NAG expects to be able to distribute the documentation in HTML5 format as soon as browser support is widely available. Please see the website, or NAGNews for any announcements in this area.

2.5 Windows HTML Help

The Windows HTML Help version of the manual is essentially a compressed version of the XHTML 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.

3 PDF Format

3.1 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.

3.2 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 use 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 on the library, and text search may be used to search the entire library contents.
