

# NAG Library

## Online Documentation

### 1 Introduction

The complete NAG C Library Manual, Mark 9 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.

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 an HTML 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 updating your browser and/or installing a (free) third party extension. Details of system requirements for various platforms are detailed below. 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. The latest version of Internet Explorer is always available from:

<http://www.microsoft.com/ie>

If you have Internet Explorer 6.0 (but not 5.5) the mathematics will be displayed to some extent without any additional plug-in, but to produce high quality mathematics rendering you should obtain the free MathPlayer from Design Science.

The latest version is available for download from: <http://www.mathplayer.com/en/products/mathplayer/welcome.asp>

##### 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 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/>

##### 2.1.3 Opera and Safari

Opera 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 HTML browser to navigate from this main index file. For each function 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:

nagtype	black
appendix	green
chap	green;
chapint	green
dtree	green
genint	green
sec	green
wdrn	grey
bibliographic reference	pale blue
eqn	pale blue
fig	pale blue
item	pale blue
note	pale blue
table	pale blue
url	pale blue
verbatimref	pale blue
website	pale blue
ifail	navy blue
arg	red
member	pink
optparam	purple
htmltoc	royal blue
plot	royal blue
rout	royal blue
tocexample	royal blue

## 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 being used. 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.

## 3 PDF Format

### 3.1 Viewing and Printing PDF Files

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

If Adobe 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.

Please note that if you are using Adobe Acrobat 4.0 or earlier you might experience some problems when printing documents that contain non-standard characters, such as integral signs, square roots and large brackets. For instance, the round brackets on page 2 of nag\_zgetri (f07awc) will appear incomplete when printed using 4.0, but will print correctly using 5.0 or later versions.

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 in Acrobat 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 an HTML browser, and then use Acrobat as a browser plugin to read or print the document.

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