

NAG C Library Chapter Introduction

x04 – Input/Output Utilities

Contents

1	Scope of the Chapter	2
2	Background to the Problems	2
3	Index	2
4	Functions Withdrawn or Scheduled for Withdrawal	2

1 Scope of the Chapter

This chapter contains matrix printing utility functions.

2 Background to the Problems

Functions are provided to allow formatted output of

- (a) general matrices stored in a two-dimensional array (real and complex data types);
- (b) triangular matrices stored in a packed one-dimensional array (real and complex data types);
- (c) band matrices stored in a packed two-dimensional array (real and complex data types).

Functions in (b) and (c) allow printing of matrices stored in formats used in particular by Chapter f16 and Chapter f07 of the Library.

By appropriate choice of arguments the user can specify titles, labels, maximum output record length, and the format of individual matrix elements. All output is directed to a specified file, or to stdout.

3 Index

Printing matrices:

Comprehensive functions:

general complex matrix	nag_gen_complx_mat_print_comp (x04dbc)
general real matrix	nag_gen_real_mat_print_comp (x04cbc)
packed complex band matrix	nag_band_complx_mat_print_comp (x04dfc)
packed complex triangular matrix	nag_pack_complx_mat_print_comp (x04ddc)
packed real band matrix	nag_band_real_mat_print_comp (x04cfc)
packed real triangular matrix	nag_pack_real_mat_print_comp (x04cdc)

Easy-to-use functions:

general complex matrix	nag_gen_complx_mat_print (x04dac)
general real matrix	nag_gen_real_mat_print (x04cac)
packed complex band matrix	nag_band_complx_mat_print (x04dec)
packed complex triangular matrix	nag_pack_complx_mat_print (x04dcc)
packed real band matrix	nag_band_real_mat_print (x04cec)
packed real triangular matrix	nag_pack_real_mat_print (x04ccc)

4 Functions Withdrawn or Scheduled for Withdrawal

None.
