## Thread-safety

International standards are now making it practicable for developers to write portable multi-threaded applications. Consequently there is an increasing demand for Library developers to produce software that is thread safe.

In a Fortran77 context the constructs that prohibit thread-safety are, potentially, DATA, SAVE and COMMON. At Mark 18 of the NAG Fortran Library the use of some of these constructs has been eliminated making the majority of routines in the Library thread safe. Furthermore NAG plans to remove the use of these constructs totally at Mark 19.

Users are advised to refer to the Users' Note for details of whether the Library has been compiled in a manner that facilitates the use of threads. Please note however that, at Mark 18, the routines listed in the following table are not thread safe in any implementations.

C02AFF	C02AGF	C02AHF	C02AJF	C05NDF	C05PDF
D01AHF	D01EAF	D01FDF	D01GBF	D01GCF	D01GDF
D01JAF	D02BJF	D02CAF	D02CBF	D02CGF	D02CHF
D02CJF	D02EAF	D02EBF	D02EGF	D02EHF	D02EJF
D02GAF	D02GBF	D02HAF	D02HBF	D02JAF	D02JBF
D02KAF	D02KDF	D02KEF	D02LAF	D02LXF	D02LYF
D02LZF	D02MVF	D02MZF	D02NBF	D02NCF	D02NDF
D02NGF	D02NHF	D02NJF	D02NMF	D02NNF	D02NRF
D02NSF	D02NTF	D02NUF	D02NVF	D02NWF	D02NXF
D02NYF	D02NZF	D02PAF	D02PCF	D02PDF	D02PVF
D02PWF	D02PXF	D02PYF	D02PZF	D02QFF	D02QGF
D02RAF	D02SAF	D02XJF	D02XKF	D02ZAF	D03PCF
D03PDF	D03PEF	D03PFF	D03PHF	D03PJF	D03PKF
D03PLF	D03PPF	D03PRF	D03PSF	D03PUF	D03PWF
D03PXF	D03PVF	D03PZF	D03RAF	D03RBF	D05BDF
D05BEF	E02GBF	E04DGF	E04DJF	E04DKF	E04MBF
E04MFF	E04MGF	E04MHF	E04MZF	E04NAF	E04NCF
E04NDF	E04NEF	E04NFF	E04NGF	E04NHF	E04NKF
E04NLF	E04NMF	E04UCF	E04UDF	E04UEF	E04UFF
E04UNF	E04UPF	E04UQF	E04URF	E04XAF	F02FCF
F02FJF	F02HCF	F04YCF	F04ZCF	F08JKF	F08JXF
F11BAF	F11BBF	F11BCF	F11DCF	F11DEF	F11GAF
F11GBF	F11GCF	F11JCF	F11JEF	G01DCF	G01DHF
G01EMF	G01HBF	G01JDF	G03FAF	G05CAF	G05CBF
G05CCF	G05CFF	G05CGF	G05DAF	G05DBF	G05DCF
G05DDF	G05DEF	G05DFF	G05DHF	G05DJF	G05DKF
G05DPF	G05DRF	G05DYF	G05DZF	G05EGF	G05EHF
G05EJF	G05EWF	G05EYF	G05EZF	G05FAF	G05FBF
G05FDF	G05FEF	G05FFF	G05FSF	G05GAF	G05GBF
G05HDF	G07AAF	G07BEF	G07EAF	G07EBF	G08EAF
G08EBF	G08ECF	G08EDF	G10BAF	G13DCF	H02BBF
H02BFF	H02BVF	X04AAF	X04ABF		

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