

**Catch coding problems early... save time, money, and frustration before debugging even begins!**

**Efficient development and maintenance of FORTRAN 77 and 90 programs begins with FORTRAN-lint<sup>®</sup>**

**The comprehensive analysis of FORTRAN-lint finds many bugs before traditional debugging begins.**

**The earlier a bug is caught, the less it costs to fix!**

**FORTTRAN-lint** by CLEANSCAPE is a tool designed to analyze FORTRAN source programs at all stages of their development.

**FORTTRAN-lint** begins by analyzing each source module separately just as a compiler would, only much more thoroughly. Then FORTRAN-lint goes on to do what no compiler can do: FORTRAN-lint looks at all the modules of the project and detects errors between modules.

**FORTTRAN-lint** detects:

- ◆ Inconsistencies in variable and argument lists between modules
- ◆ Inconsistencies in common block declarations
- ◆ Questionable, non-portable or wasteful code
- ◆ Unused variables and functions
- ◆ Variables which are referenced but never assigned a value
- ◆ Obsolete FORTRAN 77 features in FORTRAN 90 code
- ◆ Variable usage conflicts

**FORTTRAN-lint** provides support for Native FORTRAN 77 and FORTRAN 90.

The amount of diagnostic information produced by FORTRAN-lint is determined by options specified on the command line, and can vary from severe errors only to matters of style.

**FORTTRAN-lint provides an extremely quick, convenient and reliable method for locating errors in programs. FORTRAN-lint saves time, money, and frustration!**

# PUTTING ***FORTRAN-lint*** TO WORK

## SPEED DEBUGGING

FORTRAN-lint finds bugs and possible bugs before the programmer even starts the debugging process. Questionable, wasteful, and conflicting definitions between modules are spotted for human consideration.

### *lint Debugging Sample*

```
CALL GETUNIT(5,PUNIT,|UNIT)
                ^
GENCOD:Program line 5:
INTERFACE ERROR - fixed argument is
changed by subprogram
```

## MAINTAIN LARGE FORTRAN PROGRAMS

Large bodies of code, involving hundreds of source modules, are difficult to maintain and enhance reliably. FORTRAN-lint provides a global view to pinpoint areas warranting human programmer judgement.

## LEARNING FORTRAN90

FORTRAN-lint is very effective in reducing the time spent learning FORTRAN and improves the development of good FORTRAN programming style.

## ENFORCE STANDARDS WITHIN A PROGRAMMING GROUP

The manager of a programming group cannot read and understand every line of source code written by all members of a team. However, by processing the source files with FORTRAN-lint, the user defined reporting capabilities reveal deviations from good practice, help coordinate group standards and expedite implementation.

## INCREASE FUTURE PORTABILITY

The FORTRAN language is often touted as a program development vehicle to allow programs to be more easily moved to different computers in the future. This highly desirable portability can be lost without even realizing it if programmers carelessly use machine or compiler dependent constructs. FORTRAN-lint has a special switch to turn on this type of checking.

***FORTRAN-lint can also be used to:***

## MAP OUT UNFAMILIAR PROGRAMS

FORTRAN-lint produces optional tables and diagrams that can serve as a complete and understandable guide to any large FORTRAN program.

FORTRAN-lint provides a options, produces tables, diagrams and reports, which for example can show all instances throughout a project where variables have not been explicitly assigned a data type.

*FORTRAN-lint is written in 'C', runs on VMS and various Unix platforms and is backed by a 90 day warranty.  
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**For more information or to obtain an evaluation copy, contact:**

4.00