

## Building Reusable Programs as Includes or Macros

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### ABSTRACT

Writing a program entails considerable investment of time spent in research, development and testing. By examining project programs with a critical eye one can identify programs with similar functionality, i.e. one can recognize a pattern.

This paper examines the steps in developing reusable programs. Topics include guidelines for identifying parameters and the development, testing and documentation cycles. Development examples include code from `proc freq`, the import wizard, and Enterprise Guide.

Benefits of developing a library of reusable programs include: faster development time for new programs, because they are shorter and time spent testing is reduced; programs with reusable components (routines or subroutines) are well-documented and easy to read, which promotes their reuse.

Expected audience is intermediate to advanced users and macro programmers.

**Keywords:** documentation, include, macro, parameter, readability, reuse, routine, subroutine, testing.