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Alfred C. Hartmann

A Concurrent Pascal Compiler
for Minicomputers



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Abstract

This paper describes a seven-pass compiler for the Concurrent Pascal programming language. Concurrent Pascal is an abstract programming language for computer operating systems. The language extends sequential Pascal with the monitor concept for structured concurrent programming. Compilation of Concurrent Pascal on a minicomputer is done by dividing the compiler into seven sequential passes. The passes, written in sequential Pascal, generate virtual code that can be interpreted on any 16-bit minicomputer. It has been running on a PDP-11/45 computer at Caltech since January 1975.

A Concurrent Pascal Compiler for Minicomputers

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