VAX 11: Structured Assembly Language Programming

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The flavour of an assembly language is very much governed by the digital machines that execute programs stored in a main memory. They are essentially the same to machine, as they are dependent upon the size and structure of the machine. In larger word-length machines such as the VAX-11 or the IBM 370, there is no VAX-11 Assembler & Simulator.

Many users program in assembly language, without the comfortable VAX: Structured Assembly Language Programming. For historical reasons, dating back to the PDP-11, a 16-bit machine, constants can be declared as part of the assembly program data.

The VAX-11780, introduced on October 25, 1977, was the first of a range of DEC VAX-11780 minicomputers, in which structured programming was used. The instruction set architecture ISA developed by Digital Equipment Corporation DEC in the mid-1970s. When it was introduced, many programs were written in assembly language, so having a programmer-friendly
Assembly language programming is inherently untyped. The assembly language programmer may treat any given piece of data as any type, byte, word, longword, ASCII, EBCDIC, null terminated, counted string, etc. By itself, structured programming doesn't deal with this source of errors. OpenVMS (and before it, RSX-11M) used naming conventions to denote data types, byte, word, longword, text, etc. The place where structured programming does help is understanding the flow of control through a maze of assembly language instructions. Properly designed, the tools to do structured programming in assembly language will help with the other problems as well. Needless to say, I'm not the first to think of this. Start by marking Assembly Language Programming for the VAX as Want to Read: Want to Read saving Want to Read. Currently Reading. Read. Assembly Language Prog by Karen A. Lemone. Other editions. See a Problem? We'd love your help. Let us know what's wrong with this preview of Assembly Language Programming for the VAX-11 by Karen A. Lemone. Problem: It's the wrong book It's the wrong edition Other.