

A FULL SCREEN EDITOR IMPLEMENTED IN PASCAL

by

THEODORE JOHN SOCOLOFSKY

B.S., KANSAS STATE UNIVERSITY, 1980

-

---

A MASTER'S REPORT

submitted in partial fulfillment of the

requirements for the degree

MASTER OF SCIENCE

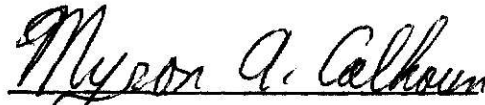
Department of Computer Science

KANSAS STATE UNIVERSITY

Manhattan, Kansas

1981

Approved by:



Major Professor

SPEC  
COLL  
LD  
2668  
.R4  
1981  
S65  
c.2

A11200 067053

ii

#### ACKNOWLEDGEMENTS

I would like to thank Professor Ed Basham for revising the introduction, and Nassrin Tavakoli for paraphrasing parts of chapter 2 of "Pascal Microengine Computer Pascal Operator's Manual" (release A0 December, 1979) for sections of chapter 2 in this document. I thank Kim Janne for his valuable hints.

## TABLE OF CONTENTS

INTERNAL IMPLEMENTATION	page
1. Introduction .....	1
2. Modes of SEDIT.....	1
3. Organization of SEDIT.....	2
3.1 Command Execution Module.....	3
3.2 Added Command Definition Module.....	3
3.3 Macro Execution Module.....	3
3.4 Console And Keyboard Translators.....	4
3.5 Virtual File System.....	5
4. Terminal I/O.....	8
5. File I/O.....	8
6. File Type.....	8
7. Work File.....	9
8. Descriptor File.....	9
9. Status Variables.....	9
 USER'S MANUAL	
1. ENTERING THE EDITOR.....	13
2. EXITING THE EDITOR.....	15
3. PRIMITIVE COMMANDS.....	16
3.1 Moving Commands.....	17
jump.....	18
page.....	18
find.....	18

3.2 Modifying Commands.....	19
insert.....	19
delete.....	20
copy.....	21
exchange.....	21
replace.....	22
display hexadecimal.....	23
examine spelling.....	23
margin.....	24
adjust.....	24
4. SETTING FORMAT AND MACROS.....	25
4.1 SET format control.....	25
Auto-Indent.....	26
Fill.....	26
Margins.....	26
Word.....	26
4.2 SET Macro Definations.....	27
5. MISCELLANEOUS COMMANDS.....	27
verify.....	27

#### PROGRAM DOCUMENTATION

1.Introduction.....	28
2.Input Output.....	29
3.Data Structure.....	30
4.Initialition.....	32

5. File names.....	33
--------------------	----

#### appendix

1. Command Summary.....	35
2. Pascal Prefix.....	37
3. Class Types.....	42
4. Sedit1.....	52

## SEDIT INTERNAL IMPLEMENTATION

1. INTRODUCTION

SEDIT (for S creen EDIT or) is a full screen editor. This editor provides a CRT terminal user an efficient means of editing information displayed on the screen. This editor, in contrast to most editors, provides the user a visual machine interactive means to move, correct, change and manipulate displayed text files. Accordingly, full screen editors are much more efficient and effective than other usual types of editors.

SEDIT is written in PASCAL language and implemented on Perkin-Elmer OS/32 MTM operating system. PASCAL was chosen because of its portability to other machines and operating systems. PASCAL is also a program language that is easy to maintain and modify. SEDIT is designed to operate on a variety of terminals, including both dumb and smart CRT terminals. This versatility is achieved through a modular design such that selected modules can be resident in smart terminals thus relieving the central processor of part of the work. Other modules can be modified such that SEDIT is blind to vendors differences in CRT terminal characteristics.

The following paragraphs provide a detailed description of SEDIT.

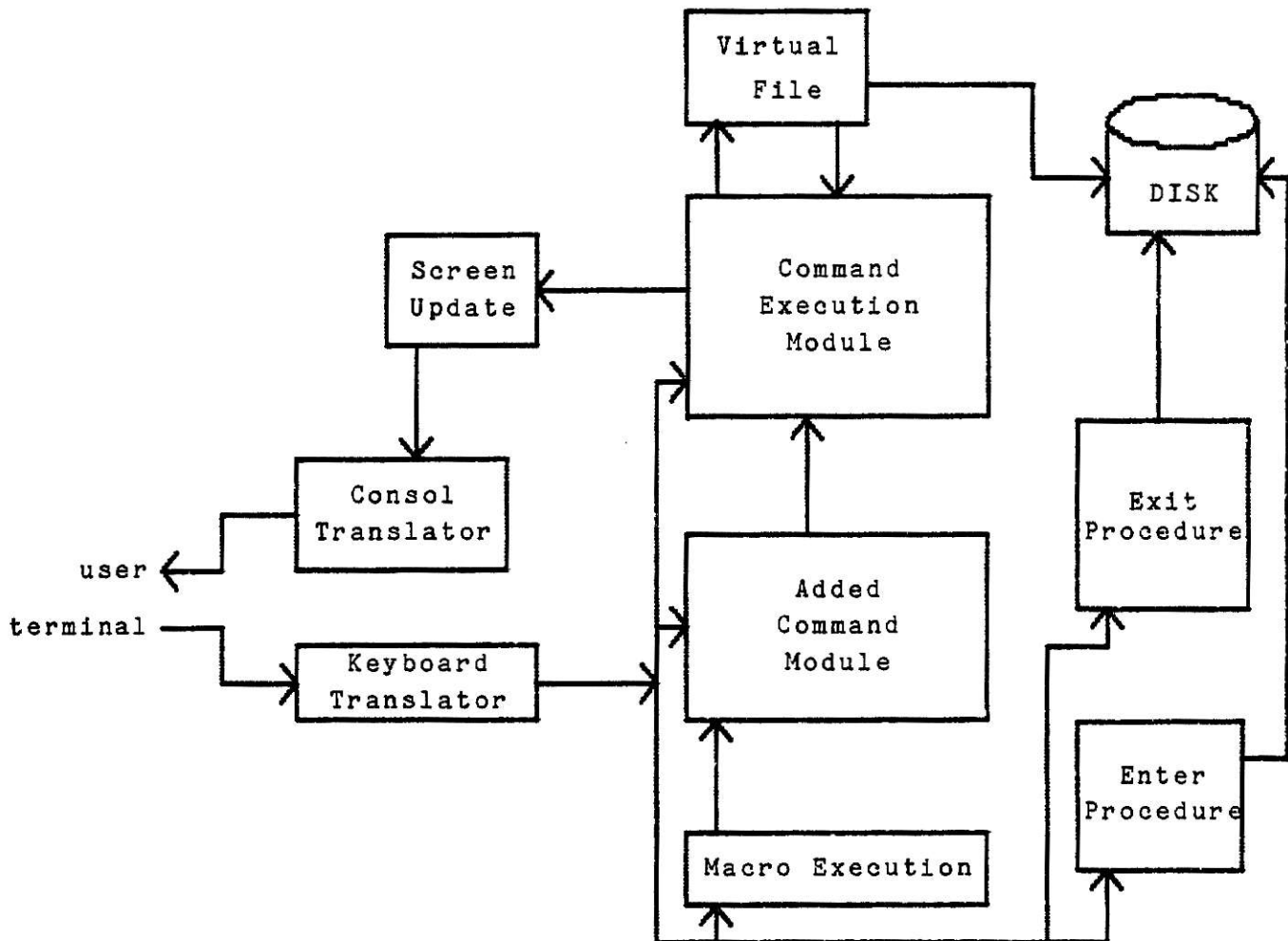
2. MODES OF SEDIT

SEDIT operates in two modes: Command and Modify mode. When in

command are ignored. The modify mode is used to change or correct an existing text file. The modify mode too has a set of valid acceptable inputs. The terminal operator can easily change from one mode to the other by means of the terminals escape key or control-C key.

### 3. ORGANIZATION OF SEDIT

SEdit is organized around a disk file and a set of modules and procedures as shown at figure 1. A discussion of the pertinent modules follows:



ORGANIZATION OF SEDIT