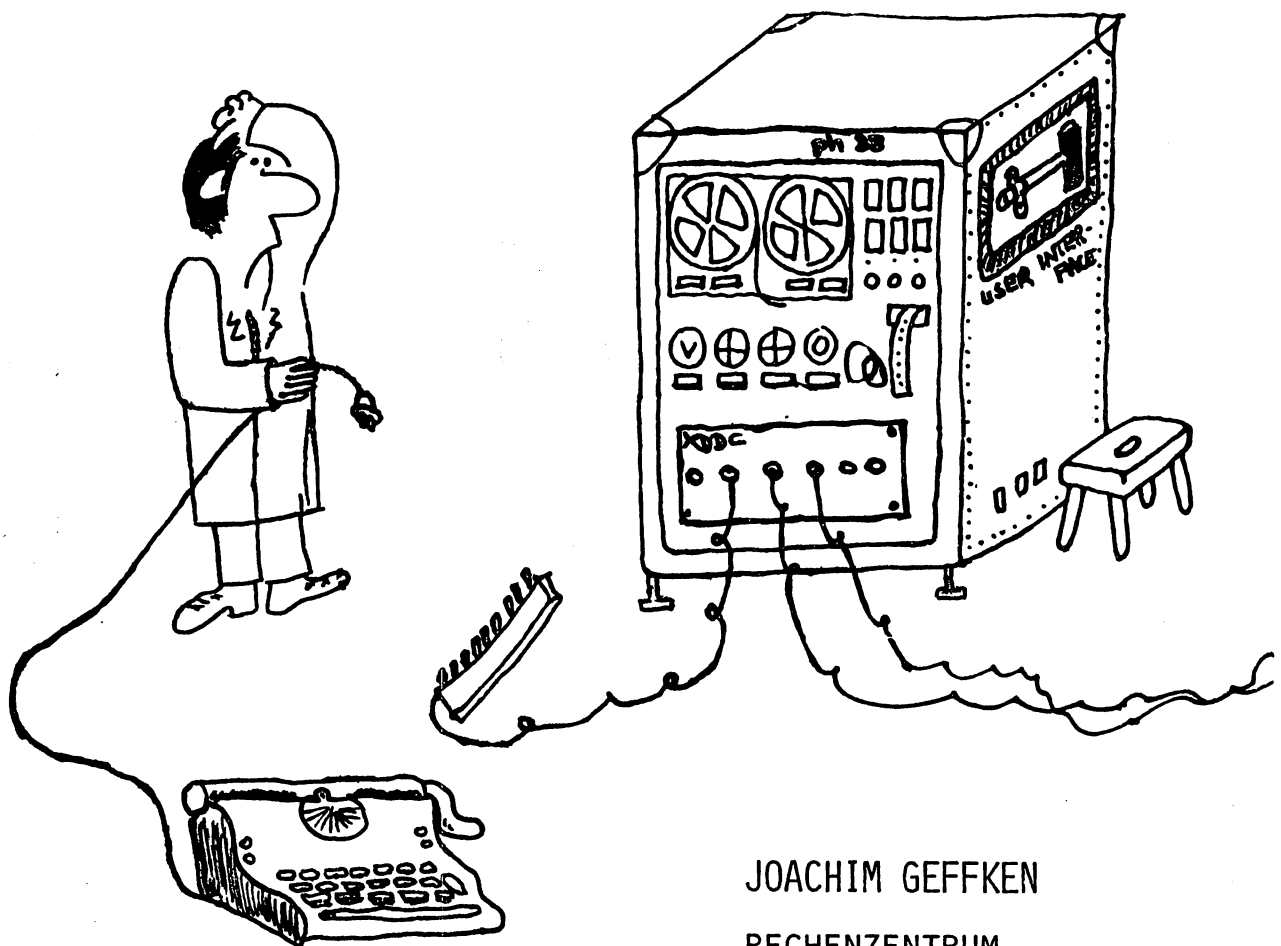


Integrated Data - and

Textprocessing with hp3000



JOACHIM GEFFKEN

RECHENZENTRUM

HERBERT SEITZ KG

GRÜNENSTRASSE 11/12

2800 BREMEN 1

Survey

⇒ **Introduction**

⇒ **File access**



⇒ **Dataselection**

⇒ **Correction aid**

⇒ **Customizer**

⇒ **Supervisor**

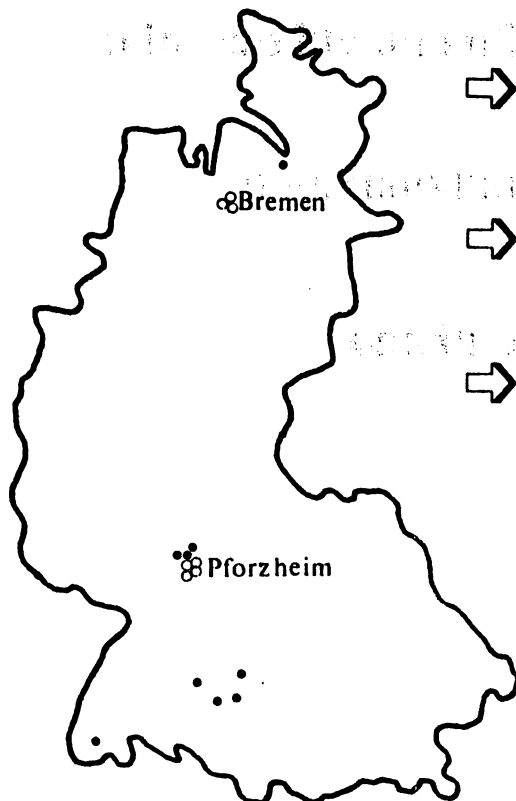
⇒ **Interface**

Introduction

The Herbert Seitz Company is ...

- ➡ A REALTIME DATAPROCESSING SERVICE BUREAU
- ➡ AND SOFTWAREHOUSE
- ➡ AND HEWLETT PACKARD OEM

with (1981) ...



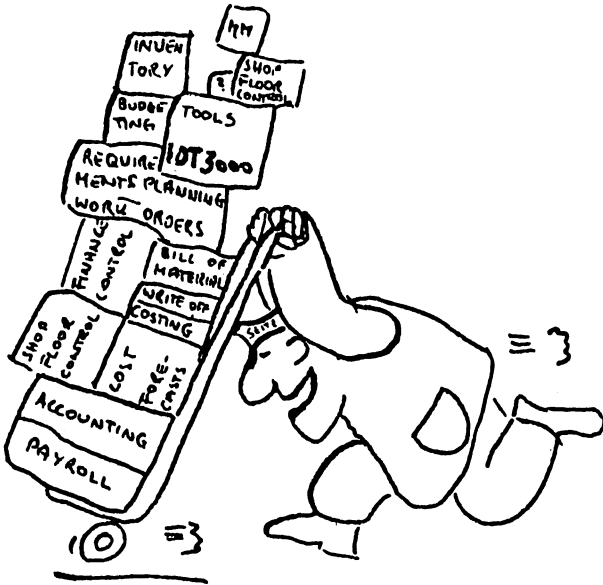
- ➡ 7 OWN HP 3000 (SERIES III AND 44) IN OUR BREMEN AND PFORZHEIM BRANCH
- ➡ AND 10 HP 3000 SERIES III IN ASSOCIATED COMPANIES
- ➡ WITH APPROX. 350 TERMINALS SPREAD OVER GERMANY CONNECTED VIA HARDWIRED LEASED LINES/DIALED LINES

Location of:

- own Computers
- Associated Companies

Introduction 2

WE PROVIDE OUR SERVICES IN GERMANY AND FRANCE FOR COMMERCIAL APPLICATIONS LIKE ...



- ➡ ACCOUNTING
- ➡ PAYROLL
- ➡ MATERIAL MANAGEMENT
- ➡ SHOP FLOOR CONTROL, CAPACITY PLANNING
- ➡ TOOLS FOR HP 3000 OPERATION, SOFTWARE-DESIGN AND DOCUMENTATION

OUR USERS ARE ...

- ⇒ WORKMEN
- ⇒ DATA TYPISTS, CLERKS
- ⇒ MANAGERS

ONLY A FEW OF THEM ...

- ⇒ ARE SPEAKING (HP-)ENGLISH
- ⇒ HAVE DP EXPERIENCE
- ⇒ HAVE SEEN ANY TERMINAL BEFORE



Introduction 3

THIS PRESENTATION IS A GENERAL DESCRIPTION OF SOME TECHNIQUES OF INTEGRATED DATA- AND TEXTPROCESSING ON HP3000 COMPUTERS AS THEY ARE IMPLEMENTED IN IDT3000. THIS IS NOT A COMPLETE PRODUCT OVERVIEW.

IDT3000 IS A DATA- AND TEXTPROCESSING SOFTWARE PACKAGE DESIGNED BY HERBERT SEITZ KG WITH:

- AN IMAGE TEXTDATABASE AND DICTIONARY
- POWERFUL TEXTEDITING AND FORMATTING FEATURES FOR BUSINESS LETTERS AND REPORTS
- FILE ACCESS TO IMAGE-, KSAM- AND MPE-FILES
- A SELF LEARNING DICTIONARY AND AN ON-LINE CORRECTION AID
- MULTILINGUAL SCREENS, MESSAGES AND HYPHENATION ALGORITHMS
- A CUSTOMIZER FOR CHARACTER SETS, TERMINAL- AND PRINTERTYPES, DATAFILES, DATADEFINITIONS AND OPERATING ENVIRONMENTS
- INTERFACES TO DATAPROCESSING AND DATACOMMUNICATION
- A DAILY REPORT OF THE OUTGOING LETTERS AND REPORTS
- A TRACKING MECHANISM FOR RENEWED SUBMISSIONS
- A BATCH PROCESSING INTERFACE

CORRECTION AID / DICTIONARY (1)

GENERAL CONSIDERATIONS:

- THE USE OF A DICTIONARY MAKES ONLY SENSE IF THE VOCABULARY IS SUFFICIENT
- A VOCABULARY OF APPROXIMATELY 150.000 WORDS IS A REASONABLE COMPROMISE (VOCABULARY, DISC SPACE AND ACCESS TIME)
- A STATISTICAL EVALUATION OF THE VOCABULARY DURING THE SELECTION-PROCESS IS ADVISABLE
- THE GENERAL RULE OF THUMB FOR DATABASE CAPACITIES SHOULD BE KEPT IN MIND IN ORDER TO GAIN REASONABLE RESPONSE TIME (I.E. CHECKING OF 100 WORDS IN 2 - 3 SECS.)
- UNTIL THERE ARE BETTER ALGORITHMS AVAILABLE FOR PARSING, INTERPRETING AND UNDERSTANDING TEXT IN HIS CONTEXT IT IS NECESSARY TO MAKE THE DICTIONARY

⇒⇒ USER ACCESSIBLE

AND

⇒⇒ SELF LEARNING

SEE NEXT PAGES ...

CORRECTION AID / DICTIONARY (2)

Form 4 Maintenance correction aid

word :



userfriendliness

☐ (X) Copy display to printer

Please enter new word for Your dictionary !

THE USER MAY ENTER OR UPDATE DICTIONARY ENTRIES WHENEVER NECESSARY (A).

CORRECTION AID / DICTIONARY (3)

Form 2 Maintenance correction aid/ hyphenation exceptions IDT 3000

- ☐ (1) Vocabulary into correction aid from 'text name' (A)
 (2) Only from section: (B)
 (3) Print correction aid totally
 (4) Print hyphenation exceptions totally
 (5) Vocabulary from MPE-file _____ (C)
 into correction aid
 (6) Vocabulary from MPE-file
 into hyphenation exceptions file
 (7) Copy correction aid into MPE-file (D)
 (8) Copy hyphenation exceptions into MPE-file
- Printer No.

Please enter required activity and press ENTER !

NEW VOCABULARY MAY BE ENTERED FROM THE TEXTDATABASE (A) OR ONLY SOME SECTIONS (B) OR MPE-FILES (C). IF THE TEXT IS CAREFULLY CHECKED IN THE FIRST PERIOD OF USE THE DICTIONARY WILL BECOME MORE AND MORE SUFFICIENT FOR THE SPECIFIC APPLICATION. THE DICTIONARY MAY BE RESTORED TO MPE FILES (D) FOR BACKUP PURPOSES OR STATISTICAL EVALUATIONS.

CORRECTION AID / DICTIONARY (4)

```

Form 143                               Text maintenance                               IDT 3000
Text name CORRDEMO Section A1 Password
(1) text entry (4) insert at
(2) print on (5) modify from
printer (6) display from line
(3) renumber (7) delete all, or from line to
(A) (8) duplicate line to
(X) Correction aid (9) search pattern from
1 11 21 31 41 51 61 71
(C)
*Start*
This is an example of the IDT3000 "self learning" dictionary. The
words not contained in the dictionary are displayed in inverse
video and the user is asked to check this words.
(D)
Please check your text and correct errors !!

```

THE CORRECTION AID CAN BE ENABLED THROUGH THE USER (A) AND WORKS DURING TEXTENTRY OR UPDATE (B). UNKNOWN (NOT NECESSARY WRONG) WORDS ARE MARKED (C) AND THE USER IS PROMPTED FOR RECHECKING AND CORRECTING (D).

CORRECTION AID / DICTIONARY (5)

Form 3

Maintenance of hyphenation-exceptions

IDT 3000

Word : ABBREVIATION
 Hyphenation at : ☒ ☒

Ⓐ

(^) Normal hyphenation after this column
 (K) for ck to k-k hyphenation (special feature for german)
 (V) for consonant duplication (special feature for german)

existing definitions will be displayed

☐ (X) Copy screen to lineprinter

Please mark where You want a hyphenation

THE USER MAY ENTER OR ALTER EXCEPTIONS FOR THE HYPHENATION ALGORITHM Ⓐ WHEN NECESSARY. IN THIS WAY THE STANDARD PRECISION OF APPROX. 95% MAY BE INCREASED >99% FOR A SPECIFIC APPLICATION WITH ITS TYPICAL SET OF VOCABULARY AND SIZES OF THE FORMATTED TEXT.

CORRECTION AID / DICTIONARY (6)

Form 6

Pattern Maintenance

IDT 3000

No.	Pattern	(A)	(B)
300	\$ (IDT 3000 the integrated Data- and Textprocessing Software\$)		

Existing patterns will be displayed !

☐ (X) Copy screen to lineprinter

Please enter or modify pattern!

COMPLEX TEXT EXPRESSIONS MAY BE DEFINED AS TEXT PATTERNS (A), IF NECESSARY WITH TEXT FORMATTING COMMANDS (B). PATTERNS ARE CALLED WITH THE COMMAND &nnn (nnn = PATTERN NO.).

FILE ACCESS (1)

THE INTEGRATION OF DATA- AND TEXTPROCESSING REQUIRES:

- **COMFORTABLE ACCESS TO DIFFERENT FILE TYPES
(IMAGE, KSAM, MPE)**
- **USER ACCESS TO ALL FILES WITH READ ACCESS**
- **UNLIMITED USER ACCESS TO THE CONFIGURATION
OF THE OPERATING ENVIRONMENT**
- **EASY MODIFICATION OF DATA FORMATS AFTER
LAYOUTCHANGES**
- **DATA ACCESS VIA DATA DICTIONARIES**

SEE EXAMPLES NEXT PAGES ...

FILE ACCESS (2)

Form 2	File Configuration	IDT 3000
Specification of Address-File: Filename <u>KDSTAM</u>		
Filetype		
☐ (1)	IMAGE-DB <u>ADRSTA</u>	Password <u>MGR</u>
	Searchitem <u>ADRNR</u>	(Detail Dataset)
☒ (A) (2)	KSAM-File (Access via Primary-Key)	
(3)	MPE-File (sequential, only for Serial Letters)	
(4)	Address-File not used	
Specification of the <u>Order</u> File : Filename <u>ISTTD1</u>		
Filetype		
☐ (1)	IMAGE-DB <u>PRODOT</u>	Password <u>MGR</u>
	Searchitem <u>IDTNR</u>	(Detail Dataset)
☒ (B) (2)	KSAM-File (Access via Primary-Key)	
(4)	Second Master-File not used	
☐ (X)	Copy screen to lineprinter	
Please enter data and press -ENTER-		

THE USER MAY DEFINE OR CHANGE FILENAME AND TYPE FOR AN ADDRESSFILE (A) AND ANOTHER USER SELECTABLE FILE (B).

FILE ACCESS (3)

Form 5 Customizing data access (address-file and master-file 2) IDT 3000

A (A) Customizing address-file (B) Customizing master-file 2

In this form You may customize Your Address- file

You will have to describe each field (1 - 50).
Existing descriptions will be shown.

Field No.	Fieldname (B)	Start Data-(1) Col.	Size(2) Type	Format(3) (F)
12	(A) Name	019		28
(1) P4-P12 packed numeric item (C) (D) (E) (3) 'X' place for 1 alphanumeric character C2-C10 binary coded numeric item F alpha-numeric item 'Z' suppress zeros (2) Size : the last digit must be you may need one digit for a sign character! an 'X' for a sign character (numeric-item) ☐ (X) Copy screen to lineprinter Please enter fieldformat!				

UP TO 100 FIELDS PER USER AND/OR SESSION CAN BE CONFIGURED (A). THE NAME (B), POSITION (C), DATA TYPE (D), SIZE (E) AND OPTIONAL EDIT MASKS (F) CAN BE DEFINED AND MODIFIED WHEN NECESSARY.

FILEACCESS (4)

Form 2	Formatting the text	IDT 3000
Text name	demober1	Section A1 Password
☐ (1) Formatting text (text file -> formatted text file)	Columns	55
☐ (2) Print formatted text	on printer No.	
☒ (X) Insert addressee of	1000008	
☒ (X) Add from master-file2 Orders	from	935-001/21C
☒ (X) Blockformat required		
Please enter the required options and press -ENTER- !		

THE FILEACCESS (AND THE DATA SELECTION) CAN BE DONE DURING THE TEXT FORMATTING (A).
 DATA MAY BE SELECTED AND INSERTED FROM THE ADDRESSFILE (B) AS WELL AS FROM THE
 MASTER FILE 2 (C).

FILEACCESS (5)

Form 4	Businessletters	IDT 3000
Text name Section Password		
☐ (1) From unformatted text or (2) formatted file to printer No.		
☐ (1) A letter to addressee: (B)		
☐ (2) without accessing the address-file		
A (3) A letter to all addresses of the address-file		
☐ (4) Only selected addresses with field field		
☐ (X) Using letterhead: _____ dated for renewed submission : _____		
☐ (X) With data of Order - Master-file of C		
☐ (X) Margin alignment _____ Column (only printer 2601)		
Your sign _____	Your letter _____	Our sign _____ Date _____
Please enter the required processing/selection options and press -ENTER- !		

THE FILEACCESS (AND THE DATA SELECTION) CAN BE DONE DURING THE PRINTING /
 SELECTING OF BUSINESS LETTERS (A). DATA MAY BE SELECTED AND INSERTED FROM
 THE ADDRESSFILE (B) AS WELL AS FROM THE MASTER FILE 2 (C).

DATA SELECTION (1)

THE SELECTION OF DATA OUT OF THE ABOVE MENTIONED DATA FILES
CAN BE DONE IN THE FOLLOWING WAYS:

- THROUGH LOGICAL COMPARE COMMANDS DURING THE
BUSINESS LETTER PRINTING (SELECTED LETTERS)
- THROUGH DATA(BASE) INQUIRY LANGUAGES AND/OR
REPORT GENERATORS (QUERY, REPORT3000, ASK,
QUIZ, QUICK, GENEASYS ETC.) PROVIDING THE
SELECTED DATA IN A IDT3000 BATCH INTERFACE
FILE
- THROUGH BATCH- OR SESSION MODE APPLICATION
PROGRAMS PROVIDING THE SELECTED DATA IN AN
IDT3000 BATCH INTERFACE FILE

SEE EXAMPLES NEXT PAGES ...

DATA SELECTION (3)

Form 1&3		Text maintenance		IDT 3000
Text name DEMOBERL		Section A2	Password	Text-File
☒ (1) text entry	(4) Insert at			
(2) print on printer ☐	(5) modify from			
(3) renumber	(6) display from line			
(X) Korrektur	(7) delete all, or from line	to		
	(8) duplicate line	to		
	(9) search pattern	from		
	(0) copy	to		
1 . 11 . 21 . 31 . 41 . 51 . 61 . 71				
Start				
This is an A example of IDT300's datainsertion feature.				
Dear Mr. &A12,				
thank You for Your letter and Your interest in our new &B31. The				
price of &B35 is very attractive.				
Our local representative Mr. &D SALESMAN will contact You within the				
next few days and provide further information for You.				
Sincerly Yours\$R\$R&Vsigner\$R&Vtitle B				

DATA ELEMENTS CAN BE DEFINED BY IDT3000 INTERNAL FIELD NUMBERS **A** (REFERRING TO THE CUSTOMIZED FILE-ENVIRONMENT) OR BY DATA ELEMENT NAMES OF A DATA DICTIONARY **B** (DICTIONARY 3000).

CUSTOMIZER (1)

Form 1	Customizer for Hardwareconfiguration	IDT 3000
--------	--------------------------------------	----------

☒ (B) Char.Set : (1) ASCII/UK (2) Deutsch(ISO) (3) Francais (4) Espanol
☒ (C) Language : (1) English (2) Deutsch (3) Francais (4) Espanol

☒ (X) Auditfile used, (E) addressee in field No. ☒ (D)
☒ (X) Database for Hyphenation-Exceptions used
☒ (X) Correction-Aid used

Printer	Type	Device-Class		Printer	Type	Device-Class
1	H O C H	LP2601	(A)	2	H O C H	LP
3				4		
5				6		LP2601
7		34		8		35

(A) Terminal-Printer (B) Lineprinter 2613/2617/2619
 (C) Matrixprinter 2608/2631 as Hardcopy (D) as Device
 (E) Daisywheelprinter 2601 as Hardcopy (F) as Device
 (H) Olympia ESW100R0 as Hardcopy
☐ (X) Copy screen to lineprinter

Please enter data and press -ENTER-

THE INTEGRATION OF DATA- AND TEXTPROCESSING REQUIRES THE OPTION OF TEXTPROCESSING WITHIN THE EXISTING DATAPROCESSING (HARDWARE-)ENVIRONMENT (A) INCLUDING CHARACTER SETS (B), LANGUAGES (C), DATA LAYOUTS (D) AND THE PROCESSING ENVIRONMENT (E) + (F).

SUPERVISOR

Form 1	Daily Report/Renewed submission	IDT 3000
☐ (1) Print daily report (A) ☐ (2) daily report only for business letters ☐ (3) check list for renewed submission (B)		Printer No. ☐
☐ (A) Totally ☐ (B) Date of beginning (C) ☐ (C) From this date up to		
Sort item		
1st ☐	(A) Print date	(D) Text name
2nd ☐	(B) Date of renewed submission	(E) Addressee
3rd ☐ (D)	(C) User	
4th ☐		
Optional only 'text name' _____ only user _____		
Comment : _____		

THE SUPERVISOR FEATURE ALLOWS SOME KIND OF PROCESSING FUNCTIONS LIKE DAILY REPORTS OF OUTGOING LETTERS AND REPORTS **(A)** OR RECORDS OF RENEWED SUBMISSIONS, THAT ARE DUE FOR NEW ACTIONS **(B)**. BOTH REPORTS MAY BE TOTAL OR A PARTIAL SELECTION **(C)** WITH DIFFERENT SORT CRITERIA **(D)**.

I N T E R F A C E S

INTEGRATED DATA- AND TEXTPROCESSING REQUIRES SEVERAL INTER-
FACES BETWEEN THE TEXTPROCESSING AND

- THE COMPUTER FILES (MPE, KSAM, IMAGE)
- DATA DEFINITIONS (TRADITIONAL FILE LAYOUTS,
DATA BASE SCHEMAS, DATA DICTIONARIES)
- THE BATCH PROCESSING
- DATA SELECTIONS OUT OF QUERY, ASK, REPORT,
APPLICATION PROGRAMS ETC.
- VARIOUS TYPES OF PRINTING HARDWARE (FROM
TYPEWRITER TO LASER PRINTER)
- DATA EXCHANGE AND DATA COMMUNICATION
(MAGNETIC TAPES, MICROFICHES, POINT TO
POINT DATA COMMUNICATION, MULTIPOINT DATA-
COMMUNICATION, COMPUTER-COMPUTER COMMUNICA-
TION, ELECTRONIC MAIL ...)