DDDDDDDDDD DDDDDDDDDD			BBBBBBB	
DD	DD	88	BB	
DD	0.0	BB	EI	
DD	DD	35	BB	
DD	DD	BEBBBBBBB		
D D	DD	BBBBBBBB		Common Command Language
DD	DD	BB	Bb	
DD	DD	BB	BE	Implementation on STAIRS/VS - TLS
DD	DD	BE	BB	
DDDDDDDDDD DDDDDDDDDD		BBBBBBBBBB BBBBBBBBBB		Release 1

Reparto Basi di dati e sistemi informativi

R. Bartoli (CNUCE)

S. Lippi (IBM, Italy) G.A. Romano (CNUCS)

O. Signore (CNUCE)

CHUCE Via S. Maria, 36 56100 Pisa Italy

Tel. +39 50 45245 Telex 500371 CNUCE

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A copy of this report is contained in the first tile of the distribution tape.

The following JCL is suggested to obtain a print-out of the tape:

The text is written in upper and lower case characters.

The distribution tape is 9 track, 1600 BPI, labeled CNUCE. Upon request, an unlabeled tape can be distributed. The JCL suggested above refers to the standard labeled tape, if an NL tape is used, the JCL must be changed.

The tape contains 11 files:

- 1. This note
- 2. SCS.TEST.MACLIB MACLIB to compile SCS modules
- 3. SCS.TEST.PLILIB PLILIB to compile SCS modules

SCS.TEST.SOURCE

SOURCE modified for SCS and ad hoc modules Input cards for message tile generation Imput cards for CCLHELP file generation Input cards for map generation Examples of CICS tables.

EURO Database DBC8

VIRPARMS

SCS.TEST.LOADLIB LOADLIB SCS with STAIRS 2.5 PTF D0004

TLS 1.0 APAR corrected until end April 80

+ local FIX for SEARCH

CICS 1.4 PTF 601 (pre-generated system)

PL/I Optimizing Compiler, Version 1,

Release 3.0, PTF 69

SCS.TEST.CARDS

Update cards to SOURCE and MACLIB for SCS Update cards to CICS and STAIRS Bource for TTY support.

Examples of procedures

Examples of procedures

7. SCS.HELP.MESSAGE CCL Help messages file (ISAM)

- 8. TRDXEURO
- 9. TEXTEURO
- 10. INVTEURO
- 11. DICTEURO

Note that the distributed LOADLIE has the TRACE=YES option; this considerably impacts performance and is therefore not suitable in a production environment.

Therefore, if TRACE=NO is desired, the modules DLNO20, VIESOO, and VIESOO must be reassembled.

Whenever problems occur in the execution of programs written in PLI (SCS5xx) using the distributed LOADLIB these programs must be recompiled as described in point 7 of the installation instructions.

All the SCS.TEST.xxx files have been produced using the standard IEBCOPY IBM utility. The CCL.HELP.MESSAGE file has been unloaded using IEBISAM utility. The other files have been produced using a standard IEBGENER IBM utility.

The suggested space allocations for these data sets are as follows:

Data Set	BLKSIZE	LRECL		SPACE	DSONG
SCS.TEST.MACLIB	6400	80		6400, (50, 10, 10)	20
SCS.FEST.PLILIB	400	80	FB	6400, (10,10,10)	200
SCS.TEST.SOURCE	6400	80	ES	6400,(200,50,10)	\$2()
SCS.TEST.LOADLIB	6420	6420		6420,(50,10,10)	
SCS.TEST.CARDS	1600	30	FB	1600, (90, 20, 10)	20
SCS.HELP.MESSAGE	1612	1612		CYL, (1)	
K358.SCS.TNDX	1900	19	PB	CYL, (1)	DA
K358.SCS.TEXT	1954	1954	P	CYL, (1)	Dā
K358.SCS.INVT	1952	1952	12	CYL, (1)	DA
K358.SCS.DICT	1952	1952	F	CYL, (1)	DA

To install the CCL implementation on STATES/VS the following steps must be taken:

- 1. Space must be allocated for the data sets;
- 2. The content of the tape must be copied;
- 3. The new PPT, PCT, FCT and DCT must all be compiled. The entries required can be easily deduced from the examples given in SCS.TEST.SOURCE:
- The new message files (SHORT e LONG) must be generated. The input cards are contained in SCS.TEST.SOURCE. An example of the procedure is given in the SCS.TEST.CARDS file. The file CCL.HELP.MESSAGE must be unloaded. The message input cards are contained in the member CCLHELP of SCS.TEST.SOURCE:
- 5. The DBCB and PFFILE for the EURO database must be generated and the relative entries must be added to the UREG records. The appropriate cards are given in member EURODBCB of SCS.TEST.SOURCE.
- 6. In order to have TTY support, the DFHTCCLC, DFHTCEXT, DFHTCRN, and DFHTCTWX members in CICS.SOURCE must be updated using the corresponding members in the SCS.TEST.CARDS and the DFHTCP must be recompiled. The DLN020 in the STATRS.SOURCE must also be updated with the cards contained in the TWX020 member of the SCS.TEST.CAMDS:
- 7. If the CICS, STAIRS, TLS or PL/I levels are different from those indicated, the modified modules must be recompiled using a procedure which is analogous to that

given in the SCSCOMP member of the SCS.TEST.CARDS:

8. The start-up CICS deck must be modified by adding the SCS.TEST.LOADLIB as the first data set defined in the DFBRPL DD card, the VIEMSGSC, VIEMSGSB and CCLAFLP DD cards and the EURO database DD cards must be added and the DDs required for print gueues must be included.

# A. SCSTWA

A specific SCS Transaction Work Area has been defined. The layout of this SCSTWA is:

#### Assembler version

COCRITO	7.0	V7 1	% \$2 72.27 to 8	charge at the
SCSFLAG		X*80 *	GENERAL SCS PLAG SCS ENVIRONMENT	CCL1
SCSIND		A * Q U *	SUS ENVIRONMENT	CCL1
SCSCONV		X*40*	CONVERSATIONAL MODE SHORT PROMPTING SYSTEM	CCL1
SCSSYSHP		X * 20 *	SHUKT PRUMPTING SYSTEM	CCL1
SCSCMSHP	1100	X 10 *	SHORT PROMPTING COMMAND INPUT SIN. FOR PAGE CMD	CCL1
SCSPGISH		A.V.	IMPUT SIM. FOR PAGE CMD	
	-	X*02*	FIND COMMAND GIVEN	CCL 1
SCSCHRCV		X*04*	SCS COMMAND RECEIVED	CCL1
SCSNPND		X*08*	NO FIND INDICATOR	CCL1
SCSPLAG 1		XL1	GENERAL SCS FLAG	CCL1
SCSTSGN	1 20	X*10*	SCST SIGHED ON	CCL1
SCSBASE	DS	XII	NO FIND INDICATOR GENERAL SCS FLAG SCST SIGHED ON BASE FLAG SIGN ON IN PROGRESS	CCL1
SCSBSSN	07mm	X*01*	SIGN ON IN PROGRESS	CCL1
SCSBSNM	EQU	X*02*	DBNM SUPPLIED IN BASE COMMAND	CCL1
SCSBSNE	EQU		DBMM ERROR IN DASE MODULE	CCLT
SCSBSPW	EQU	X*08*	DB PW SUPPL. IN BASE COMMAND	CCL1
SCSBSTH	EQU	X * 10 *	THESAURUS NAME GIVEN THESAURUS NAME ERROR	CCL1
SCSBSTE	EQU	X*20 *	THESAURUS NAME ERROR	CCL1
SCSBSTL	EQU	X*40*	THESAURUS LANGUAGE SUPPLIED DISPLAY PLAG DISPLAY ON	CCL1
SCSDSPLY	DS	XI.1	DISPLAY PLAG	CCL1
SCSDPYON	HQU	X*80*.	DISPLAY ON	CCL1
SCSDPYFT		NA B 23 51 B	The Time of the Time of the Control	and arrest to 198
SCSDPYCT		X*20*	DISPLAY CONTROLLED TERM	CCL1
SCSQRYN		H	SCS OUERY NUMBER	CCL1
SCSSAVNM		CIA	DISPLAY FREE TEXT DISPLAY CONTROLLED TERM SCS QUERY NUMBER NAME FOR SAVE COMMAND CHERENT DISDIAY NUMBER	CCL1
SCWACDN	DS		CURRENT DISPLAY NUMBER	CCL1
	ORG	E3 575 5.3. (\$1.55 47.53)		CCL1
SCSTHES		CL4	THESAURUS NAME	CCL1
SCSTL	DS	CII	THESAURUS TANCHACE	CCL1
SCWAOPLG		XII	THESAURUS NAME THESAURUS LANGUAGE PRINT FLAG	CCLI
SCSPRIN		X * 80 *	DRING COMMAND CIVEN	CCL 1
SCSPRRN	33.0.	X * 40 *	PRINT COMMAND GIVEN REMOTE PRINTING	CCL1
er tout E it it!	22/2 W	a. Tel	ALLEVAD IBARIANO	العدالة

SCWATSK	DS SPACE	CL8 2	SCS TS KEY	CCLT
* *** *** *** *** *** *** *** *** ***		elementation, where taken delementation relationships which access acces	and the same and t	CCL1
*	ULDPL.	AI CUMBARD KUMA AKMA:	S (8 BYTES) *	CCL1
		SCWADBPW	mme dan	CCL1
SCWADE0A		P P P P P P P P P P P P P P P P P P P	DICDIAY DWYADA A ADRA MANARCO	
SCWADDRA			DISPLAY RECORD O AREA ADDRESS DSPLY DESCRIPTOR RCD AREA ADDR.	to to the second
the second of th	SPACE	2	మార్క్లి ముంది మీ మరో సంవర్సాలు కున్నుము.మీ. మీ. పాలోనక్మీ. ప్రామెల్ జోడ్ కుర్వుగు దేశ్ కేష్ పైలో కర్ 	Encolor Late 1
SCWASTDN		· ·	START DOCUMENT NUMBER (SHOW)	7011
SCWAENDN			START DOCUMENT NUMBER (SHOW) END DOCUMENT NUMBER (SHOW) INCREMENT DOCUMENT NUMBER (SHOW) CHAR FOR DEL LINE CHAR FOR BACK SPACE BASE & THES. AREA AVAIL. POS.	CCL1
SCWAINDN		7 / A	INCREMENT DOCUMENT NUMBER (SHOW)	CCL1
SCSDELIN		of one of the contract of the	CHAR FOR DEL LINE	001.1
SCSBACSP	DS	Contraction of the Contraction o	CHAR FOR BACK SPACE	CCL1
SCWABTAP	DS		BASE & THES. AREA AVAIL. POS. BASE & THES NAME AREA	CCL1
SCWABTNE	DS	CL160	BASE & THES NAME AREA	CCL1
	ORG			CCL1
SCWATSRC		CL160	T.S. QUERY RECORD ADDRESS OF P.C. TABLE	
CCLATFLD		F	ADDRESS OF P.C. TABLE	
CCLATTH		₩ ₩ ₩	ADDRESS OF THES. RELATOR TABLE ADDRESS OF FIRST STACK ELEMENT	
CCLASTK1			ADDRESS OF FIRST STACK ELEMENT	
CCLASTK2		<u> </u>	ADDRESS LAST STACK ELEMENT	
CCLASTK3		<b></b>	ADDRESS LAST STACK ELEMENT ADDRESS OF CURRENT STACK ELEMENT ADDRESS OF WORK AREA	Ţ.
CCLADDR1		7	ADDRESS OF WORK AREA	
CCLADDR2			ADDRESS OF WORK AREA	
CCLADDR3		<i>X</i>	ADDRESS OF WORK AREA	
CCLPLEY		11 T3	REAL LENGTH OF PARAGRAPH NAME PARENTHESIS LEVEL	
CCLFP1			INTERNAL PARAMETER	
CCLFP2		190 190 190-190	INTERNAL PARAMETER	
CCLFP3	DS DS	es de la companie de	INTERNAL PARAMETER	
CCLPP4	DS		INTERNAL PARAMETER	
CCLPP5	DS	3. 4. 3. 4.	INTERNAL PARAMETER	
CCLLF1	DS	H	LENGTH OF AREA BASED ON CCLADDR	
CCLLF2	DS	To provide the state of the sta	LENGTH OF AREA BASED ON CCLADDEZ	
CCLLP3	DS	a designation of the control of the	LENGTH OF ARRA BASED ON CCLADDRE	
CCLFRC	DS	¥3	RETURN CODE FROM INTERNAL MONTH	
CCLTSRCH	DS	CL1	SEARCH FUNCTION	
ROUTCD	DS	CL1	INTERNAL ROUTINE NAME	
CCLPFLAG	DS	XLI	SEARCH PLAG	
CCLINORY	EQU	X * () 1 *	SCS INTERNAL QUERY GIVEN	
CCLFFIND	3Q U	X*02*	FIRST FIND EXECUTION	
QNCHAR	DS		QUERY NUMBER IN CHAR	CCL1

	ORG	SCWATSRC		
SCWATSLN	DS	Francis (Figures)	T.S. RECORD LENGTH	CCLI
SCWANUSD	DS	CI2	ZERO BINARY AREA	CCL1
SCWATSID	DS	0CL8	SCS T.S. IDENTIFICATION	CCL1
SCWAUSID	DS	CL2	INTERNAL USER ID	CCL1
SCWARCID	DS	CL2	TYPE OF RECORD	CCL1
SCWALNNO	DS	Populari Populari	SCS QUERY NUMBER	CCL1
SCWASONO	DS	STATE OF THE STATE	LINE QUERY NUMBER	CCL1
SCWATSTL	DS	Polymer S	USER QUERY NUMBER STAIRS	CCL1
SCWAQRY	DS	CL 146	QUERY'S SAVE AREA	CCL1
	ORG	SCWAQRY		CCL 1
SCWACONN	DS	CLS	SCS COMMAND	CCL1
SCHASONY	DS	CL 138	SCS COMMAND S PARAMETERS	CCL 1
	ORG	SCWABTAP		CCL1
SCWAPRAP	DS	: #	ADDRESS OF PRINT COMMAND	CCL1
	ORG	SCWARSVA		CCL1
SCWAHALF	DS	H	HALPWORD WORK AREA	CCL1
SCWAHLF1	DS	R	2.ND HALFWORD WORK ARKA	CCL1

#### PL/I version

```
DCL SCWACDN BIN PIXED (15) /* CURRENT DISPLAY NUMBER CCL1 */
```

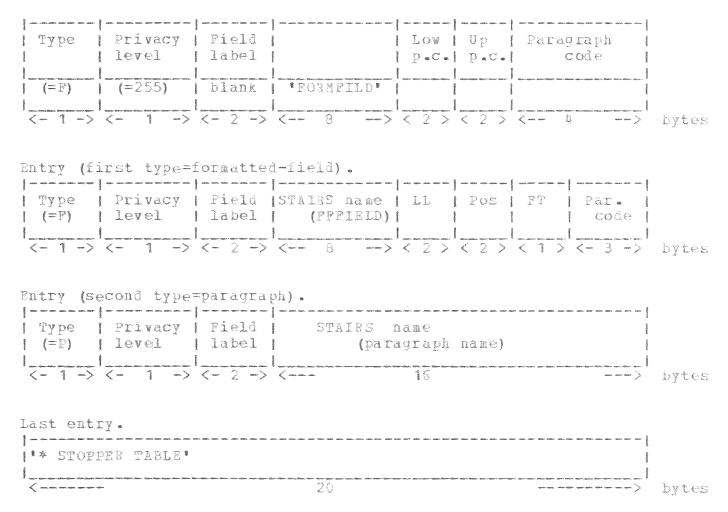
```
BASED (SCWAPTR5):
 SCWAPTR1=ADDR (SCWABTNM); /* SET POINTER ADDRESS
                                                  CCL 1
 SCWAPTR2=ADDR (SCWABTAP);
                        /* SET POINTER ADDRESS
                                                  CCL1
 SCWAPTR3 = ADDR (SCWARSVA):
                         /* SET POINTER ADDRESS
                                                  CCL 1
 SCWAPTR4 = ADDR (SCWADBPW):
                         /* SET POINTER ADDRESS
                                                  CCL 1
 SCWAPTR5 = ADDR (SCSTHES);
                         /* SET POINTER ADDRESS
                                                   CCL1 */
%PAGE;
/* FLAGS IN SCSFLAG
SCSIND BIT (8) INIT (*10000600*) STATIC,/* SCS ENVIEONMENT CCL1 */
SCSCONV BIT (8) INIT (*01000000) STATIC./* CONVERS. MODE CCL1 */
SCSSYS AP BIT (8) INIT (*00100000*) STATIC,/* SH PROMPT SYS CCL1 */
SCSCMS AP BIT (8) INIT (*00010000*) STATIC,/* SH PROMPT CMD CCL1 */
SCSPGISF BIT (8) INIT (*00001000*) STATIC,/* INP SIM. PAGE CMD CCL1 */
/*SCSFFIND BIT(8) INIT(*00000100*) STATIC,/* FIND CND GIVEN CCL1 */
SCSCMRCV BIT (8) INIT (*00000010*) STATIC,/* SCS CMD RECEIVED CCL1 */
SCSNFND BIT (8) INIT (*00000001*) STATIC;/* NOFIND INDICATOR CCL1 */
/* FLAGS IN SCSFLAG1
DECLARS
SCSTSGN BIT(8) INIT('00010000') STATIC:/* SCST SIGNED ON CCL1 */
/* FLAGS IN SCSBASE
                                                       #/
DECLARE
SCSBSSN BIT (8) INIT (*00000001*) STATIC,/* SIGNON IN PROGRES CCL1 */
SCSBSNM BIT (8) INIT (*000000010*) STATIC,/* DBNM SUPPLIED CCL1 */
SCSBSNE BIT(8) INIT(*00000100*) STATIC,/* DBNM ERROR
SCSBSPW BIT (8) INIT (*00001000*) STATIC,/* DB PW SUPPL.D
                                                CCL1 */
SCSBSTH BIT (8) INIT (*00010000*) STATIC /* THE NAME GIVEN
                                                CCL 1 */
SCSBSTE BIT (8) INIT (*00100000*) STATIC,/* THE NAME ERROR
                                                CCL1 */
SCSBSTL BIT (8) INIT (*01000000*) STATIC;/* TH LANG SUPPL.D CCL1 */
/* FLAGS IN SCSDSPLY
/*******************************
 DECLARE
SCSDPYON BIT (8) INIT (* 100000000) STATIC./* DISPLAY ON
SCSDPYFT BIT (8) INIT (*01000000 ) STATIC ,/* DISPLAY FREE TEXT CCL 1 */
SCSDPYCT BIT (8) INIT (*00100000*) STATIC; /* DSPLY CONTR. TERM CCL1 */
/* FLAGS IN SCSOFLG (OUTPUT FLAG)
DECLARE
SCSPRIN BIT (8) INIT (* 100000000) STATIC,/* PRINT CND GIVEN CCL1 */
SCSPERN BIT (8) INIT (*01000000*) STATIC,/* REMOTE PRINTING CCL1 */
SCSPROF BIT (8) INIT ('00100000') STATIC . /* OFFLINE PRINTING CCL1 */
SCSPRDS BIT (8) INIT (*00010000*) STATIC:/* DISK PRINTING CCL1 */
```

#### B. Correspondence Table

A table called CCL<dbname> has been built to define the correspondence between the CCL field labels and the STAIRS paragraph names and/or formatted field names.

The format of this table is as follows:

First entry (only one type).



In order to build this table the program CCL01 must be

executed according to the example given in the member CCLTAB of SCS.TEST.CARDS.

The format of input cards is as follows:

#### First card:

col. 1-3 lower limit

col. 4-6 upper limit

Note that these two limits define the special paragraph class name 'FORMFILD'. This range must be at least equal to (number of formatted fields + 1) and must not overlay other paragraph classes.

#### Successive cards:

col. 1-2 CCL field label

col. 3-3 blank

col. 4-19 name of corresponding STAIRS paragraph or FFIELD.

The data base name is given as parameter.

#### C. The general philosophy behind the modifications

As a general rule, the SCS commands have been implemented as follows:

- the input string which contains the SCS command is passed to an ad hoc PL/I module. The string is analysed and scanned for all parameters. In general, the input is not positional. If the same parameter is entered more than once, the most recent input is assumed as that valid. Any errors are indicated.

All valid parameters are put in SCSTWA and a flag is switched on.

The input string is modified into an acceptable STAIRS format and control is returned to the STAIRS command driver.

The appropriate STAIRS modules have been modified so that their logical flow is regulated by flags (e.g. simulating inputs and masking outputs).

# D. General support modifications

The general support modifications are all those relative to CICS and to the two MACRO service modules: DLN020 and VIE900 for:

- TTY support
- Input conversion
- Conversational / nonconversational input
- SCS command definitions
- SHORT/LONG dialog (prompting)
- Message file selection
- Map selection.

#### D1. TTY Support

The TTY support has been implemented as follows:

- Time out (EP)

The BTAM issues a READ CONVERSATIONAL (i.e. a READ with time-out). This problem can be bypassed by defining the parameter TEXTTO in the macro GROUP of EP as equal to NONE or 0 depending on whether the 3705 is working in PEP or EP mode.

- Input handling (DLN020, EP, TCTTRX)

To send a message from the TWX terminal to the computer the following steps are necessary:

- 1. Press the "CONTROL" and "ALPHA" keys for ROM
- 2. Press the "RETURN" key
- 3. Press the "LF" key.

These three functions can also be achieved with just the "RETURN" key.

The DLN020 module has been modified so that a CR-LF can be sent after a READ.

In EP the CHAREC=(XONOFF,B1) parameter has been defined.

The DFHTCTWX module has been modified so that "RETURN" can be accepted as EOM.

- Translate table (DFHTCTRN)

The standard CICS translate table for TWX terminals

does not include all the possible upper and lower case characters or the transliteration for even and odd parity.

A new translate table is available.

- NL support (DFHTCEXT)

  The sequence of characters X \* 1517 \* will be converted to X \* 152/6 \*.
- System prompting

  CCL requires that the system is ready for input when the following sequence is sent '/?'.

  This implementation has been achieved by modifying the string sent by the TCP at READ CONVERSATIONAL time.

  The standard string has been changed to '/?'.

  This change implies an update to the DFHTCCLC member of the CICS.SOURCE and a new generation of the DFHTCP module.

#### D2 - Input conversion (DLN020)

The CCL dialog is essentially non-conversational, i.e. each input normally consists of a command followed by parameters. STAIRS interprets all input beginning with ".." as commands. Consequently, each input is modified by prefacing it with two dots. The input is processed by STAIRS as a command, and can then be passed to a specific module (see DLNCMDEF

STAIRS macro) .

# D3 - Conversational / nonconversational input (DLN020)

In certain cases, however, the input must not be interpreted as a command because the system is asking for a specific parameter (e.g. the Database name, the password, the thesaurus name).

In these cases, the input conversion described in previous paragraphs would be mistaken and lead to an endless loop. Therefore, the SCSCONV flag has been introduced. If this flag is switched on, no input conversion takes place. However, as CCL requires that the STOP command can be entered at any time, this word is checked in both conversational and non-conversational mode. In both cases, the input is converted to ..OFF.

This is in keeping with the STAIRS philosophy, which in certain cases accepts the input ..OFF in order to exit from an endless question-answer loop.

# D4 - SCS command definitions (DLN020, DLN010)

All the SCS commands are defined in the SCSCMDEF table, assembled using the DLNCMDEF macro.

In the SCS environment, for each input, the SCSCMRCV switch

is turned on and the command driver skips the normal input control to check whether a STAIRS command has been issued. It compares the input with the SCSCMBEF table. Incorrect and non-existent commands are refused. If the command is found in the table, control is passed to the relevant module and the SCSCMECV switch is turned off. In this way, the command driver can examine the STAIRS module in which the ad hoc module has transformed the input and can process it in the standard STAIRS mode.

## D5 - SHORT/LONG Dialog (DLN020)

The SHORT/LONG prompting is governed by two switches: SCSSYSHP (SYstem SHort Prompting) and SCSCMSHP (Command SHort Prompting) as the short prompting can either be imposed with the DEFINE command (and in this case will remain valid for the whole session) or by preceding the command by a dot "." (valid for the execution of the command). Management at command level is realised by the DLNO20 module which switches the SCSCMSHP off for each input, and then on again if the input string should begin with a dot.

## D6 - Message File Selection (DLN020)

STAIRS and TLS messages not defined directly in the modules are contained in two files which have DLNMSG and VISMSG, respectively, as their DDNAME.

The CCL messages are contained in 4 files: DLMMSGSC, DLNMSGSH, VIEMSGSC, VIEMSGSH. Whenever STAIRS or TLS use the DLN020 module to read a message from the BLNMSG or VIEMSG files in the SCS environment, the file name is changed to DLNMSGSH or VIEMSGSC. If at least one of the SCSSYSHP or SCSCMSHP flags are on, either the DLNMSGSH or VIEMSGSC file is read, otherwise either the DLNMSGSC or VIEMSGSC file is read.

If the message is not found in one of the two files, the standard files are read.

This enables the four SCS files which contain all the modified messages to be defined without the necessity of duplicating the original files.

## D7 - Map Selection (VIE900)

The maps are invoked by the modules with standard names, i.e. VIEnnamm, nam is the module number and mm is the number of the map. In the SCS environment the map name is changed to SCSnanmm. If at least one of the SCSSYSHP or

SCSCMSHP flags are on, the name of the map is changed to SCHnnnmm. The messages recalled by the maps can be found in the appropriate files owing to the modifications to the DLN020 module (See message file selection).

#### F - Command Implementation

#### E1 - Sign on (CONNECT, DLN007, VIE801, VIE804)

The sign-on procedure has been implemented by coding an adhoc CICS transaction called CONN.

The input format is as follows:

CCL
CONN[ECT] CNUCE TLS [ user-password user-name ]
STAIRS

Abbreviated forms of CONNECT (CONN, CONNE, CONNEC) are accepted as valid input. Node indication is mandatory (i.e. CNUCE).

If erroneous parameters are entered, the user is given a list of the available transactions:

SCST for information retrieval using CCL AQTL for information retrieval using STAIRS/VS - TLS AQUA for information retrieval using STAIRS/VS

and is requested to enter the code for the transaction he requires.

Valid parameters are CCL, TLS or STAIRS, optionally

followed by the user password and name. (However, if STAIRS is entered, name and password are mandatory).

When one of these parameters is entered, the appropriate transaction code (optionally followed by user password and name) is placed in the TIOA from position TIOADBA and control is passed to the DLMOO7 module by means of an XCTL; the normal STAIRS or TLS sign-on procedure takes place.

If no parameter is entered, CCL is assumed by default.

In the DLN007 module, when the active transactions are CONN or SCST, the SCSIND (SCS environment active) and the SCSCONV (conversational input) bits are switched on in the SCSFLAG flag, and the SCSBSSN bit is swiched on in the SCSBASE (sign on in progress) flag.

The conversational input bit must be switched on before the user password and name can be accepted if they have not already been entered together with the transaction code. This bit is switched off before exiting from the DLN007 module.

THE SCSBSSN bit in the SCSBASE flag regulates the logical flow in the VIE801 module, therefore, the user accesses automatically to the EURO data base (which is not associated to a thesaurus) but is completely unaware of this.

At this point, sign on procedure is complete and the

user can either issue a command, or just press the "enter" key, thus passing the control to the VIE804 module and obtaining a map which displays the permitted commands.

## E2 - BASE Command (SCS501, VIE801)

BASE select the database (name or number) that is to be searched.

BAS is also accepted as valid input.

The command format is:

```
BAS[E] [ dbname ]
[ :P = password ]
[ :TL = thesaurus language ]
[ :THES = thesaurus name or LIST ]

or

BAS[E] ?
```

Where:

dbname name of database to be accessed (four characters)
P = indicates the database password, if any (max

8 characters)

TL= asks for a thesaurus in a specific language (by default E = English)

THES= specifies the thesaurus name (four characters)

or

THES=LIST asks for a list of available thesauri

BASE? asks for the name of the currently active database and its structure (i.e. field labels)

Note that no parameter can be entered if the data base name is missing. If no parameter is entered, a list of available databases is shown, and the user is asked to select one of them.

If THES=<thname> is missing and a thesaurus is associated to the database, this thesaurus is automatically selected.

If T=MONE is specified in the DBCB, no thesaurus is selected.

The BASE command is processed by the SCS501 module. This module examines the parameters given with the command, moves them to appropriate fields of the SCSTWA and turns the necessary flags on. The input string is converted into ..CHANGE and the module then returns to DLN010, which calls VIE801.

VIE801 has been modified in order to mask prompting for parameters which have already been given in the BASE command and also to maintain a conversational input.

If essential parameters should be missing (e.g. the database name, the password or the thesaurus identification) a normal TLS dialog occurs.

The maps and the read routines have, however, been modified; the databases and the thesauri available are numbered so that they can be chosen either by their name or their order number in the output map.

When the user enters the command BASE?, the name of the database in which the user is operating is displayed, the command driver returns to the VIE804 module and a list of all the possible commands is displayed.

# <u>#3 - FIND Command (SCS502, SCS551, SCS552, SCS553, VIES63, DLN013, DLN025)</u>

The FIND command is used to enter search terms and search statements.

The abbreviated form F is also valid input.

The command format is:

Man was appeared to the control of t	
[IND]	identifier [ operator identifier ]
allose varies receive spiles object above above verses, extent visities.	Mere ration data. When down, over status draw with mean table status species status species status species species about species, when process, down species s
OL	
William Colon, deleter former station annual, annual resident estates estates estates	전한 1986 시간
[ F[IND]	
- AMERICAN CONTRACT AND ASSESSMENT ASSESSMEN	型品、超级、物质、位置、位置、位置、位置、成形、成形、成形、成形、成形、成形、成形、成形、成形、成形、成形、成形、成形、

#### Where:

#### identifier =

- a) search term or code which may be truncated or restricted to a particular type (see later identifier modification);
- b) a literal search phrase, enclosed in double quotes (e.g. "black and white");
- c) a label identifying one or more search term displayed at the terminal (e.g. T= n [ TO m ]). If the operator TO is used, the terms are logically OR\*ed;
- d) a label identifying one or more previous search statements (e.g. S= n [ TO m]).

  Once again, if the operator TO is used, the terms are logically OR ed.

# and operator=

a) - any boolean logical connector (AND, OR, NOT).

Examples:

FIND smith AND wesson
FIND S=1 OR bong

FIND T=3 TO 5 AND S=2 TO 4 NOT butterfly

If brackets are used to ensure that a sequence of operators is executed in the intended sequence, the logic within brackes is executed first.

When the same logical operator is to be used to connect a number of terms, a shortened form of list notation can be used.

Rxample:

FIND linus AND lucy AND schroeder AND snoopy is equivalent to:

FIND (AND linus; lucy; schroeder; snoopy)

and PIND ? asks for search history (display of all preceding queries)

E3.1 - Identifier modification.

An identifier may be modified using a prefix or suffix to restrict searches to individual fields or to indicate special types of search term.

M3.1.1 - Prefix.

- A prefix is divided into a field (or data element) label and relational connector.
- The accepted relational connectors are:

= , < , > , <= , >=

For field labels which do not have linear ranges

(e.g. free text) only the connector = is valid.

- With field labels with tree structured ranges, in particular for structured thesauri, standard connectors are:

DOWN UP NT BT

Other connectors may be defined by the user in the table VIET<thname>

E3.1.2 - Suffix

- The search statement can be further qualified using the suffix facility.

Example:

FIND <f11> = computer/<f12>,<f13>
where <f11>, <f12>, <f13> are field labels.

Note that search statements referring to field labels with linear ranges may not be qualified using the suffix facility. Therefore, a search statement may be qualified using prefix and suffix only if the relational connector '=' or a thesaurus relator are used.

### E3.1.3 - Prefix and parentheses

To avoid repeated use of a given prefix, a shortened form may be used.

Examples:

FIND <fl1> = butterfly AND <fl1> = daisy

is equivalent to:

FIND <fl1> = (butterfly AND daisy)

OT:

FIND (butterfly AND daisy) /<fl>

and:

FIND AU = (schultz OR parker OR hart)

is equivalent to:

PIND AU = (OR schultz;parker;hart)

OI:

FIND (OR schultz; parker; hart) /AU

#### 23.2 - Adjacency connector

When searching free text, it is possible to specify that two words should occur in the same paragraph. This is achieved by entering:

<word1> ... <word2>

E3.3 - Truncation

The character masking symbol (\$) is used to search on masked term.

Example:

FIND compus

will retrieve computational, computer, computing, etc.

E3.4 - Syntax limitations

- Field labels with linear range cannot be mixed with the others in one query.
- Backreference in gueries with field labels having linear ranges is allowed. However, the backreferenced querie(s) must be at the beginning. A logical AND between backreferenced queries and entered identifiers is assumed, irrespectively the actually entered operator.

e.g. FIND S=1 TO 3 OB na=10 AND py>=79

is coverted into:

FIND S=1 TO 3 AND na=10 AND py>=79

The FIND command is examined by the SCS502, SCS551, SCS552 and SCS553 modules.

The VIE803 module has been changed in order to mask the READ of the guery which is taken from an user acquired area.

The DLN013 module has been changed so that the CCL query, its number and the number of the last STAIRS guery can be written in temporary storage.

The guery number appears at the top of the printout of the results.

## E4 - SHOW Command (SCS503, DLN005)

SHOW causes the retrieved documents to be displayed at the terminal.

S is also assumed as valid input. The input is not positional. If a parameter should be entered more than once, the last value entered is held to be valid.

The command format is as follows:

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Command	P	arameter		Default value
Separate service and the service service and the service service and the service service and the service service service service and the service service service and the service service service service and the service service service service and the service servi	Open Americans, repert assert	securit basin, water assure conservations, descript security, water, water security, s	Pridict courses regions recovers colored control recover districts observed and all residence observed and an extension observed an extension observed and an extension observed an extension observed and an extension observed an extension observed and a	AND THE PARTY STATES AND THE STATES
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- secure - s	Brown	I = X		demons
Simples		P = P1:P2:		Manage
Tangar and the same and the sam	OT			ALL
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#### Where:

n

qn = query number

= first document number in the list to be displayed

= last document number in the list to be displayed

k = increment document number (for skimming list)

pn = field label (= STAIRS paragraph or formatted field)

Fn = predefined format

where "n" is a number ranging from 1 to 23. These numbers are in correspondence with formats "D" to "Z" that can be defined using the DLNPCDEF macro of STAIRS/VS-TLS.

The SHOW command is processed by the SCS503 module.

The search statement number, record number and record increment number are all stored in SCSTWA, while the

format is moved into a command area.

The table giving the correspondences between the STAIRS paragraph or formatted field names and the CCL field labels is loaded and scanned against the field label list given in the format parameter. The appropriate conversion takes place, and the input string is converted into:

..BROWSE <search statement number ><format>
and then processed as a normal STAIRS command. The DLN005
module has been modified to accept a document range and to
allow the processing of the record increment number
(skimming list).

# E5 - PRINT Command (SCS504, DLN010, DLN005)

The PRINT command is used to have retrieved documents printed on the offline printer or on a private print queue.

The abbreviated form P is also valid input.

The input is not positional. If a parameter should be entered more than once, the last value entered is held to be valid.

The command format is as follows:

Command	Parameter	Default value
P[AINT]	S = qn	last query 1 TO 50 1
to status wants traver desarra	[ :Pn ] [ :D = OPFLINE ]  OI [ DISK = prtg ]	D = OFFLINE

```
Where:
```

gn = query number

= first document number in the list to be displayed = last document number in the list to be displayed

= increment document number (for skimming list)

pn = field label (= STAIRS paragraph or formatted field)

Pn = predefined format

where "n" is a number ranging from 1 to 23. These numbers are in correspondence with formats "D" to "Z" that can be defined using the

DIMPODER macro of STAIRS/VS-TLS.

D = OFFLINE asks for offline printing of documents

DISK = prtg asks for printing of documents on private data set, identified as "prtg" in DCT

The search statement number, record number and record increment number are all stored in SCSTWA, while the

The PRINT command is processed by the SCS504 module.

format is moved into a command area.

The table giving the correspondences between the STAIRS paragraph or formatted fields names and the CCL field labels is loaded and scanned against the field label list given in the format parameter. The appropriate conversion takes place, and the input string is converted into:

..BROWSE <search statement number ><format>
and then processed as a normal STAIRS command. The DLN005
module has been modified to mask the output and to
simulate a "..PHINT" as input. The module DLN010 has been
modified to accept a document range and to allow the
processing of the record increment number (skimming list).

## B6 - DEFINE Command (SCS507)

The DEFINE command is used to assign values to specific parameters of the system.

The abbreviated form DE is also valid input.

The command format is as follows:

	that was a supply of	THE COLUMN TWO COLUMNS AND THE COLUMNS AND THE COLUMN TWO COLUMNS AND THE COLUMN TWO COLUMNS AND THE COLUMNS AND THE COLUMNS AND THE COLUMN TWO COLUMNS AND THE COLUMN	of collect control manus, control manus, control manus, collect ma	AND MANY WINE, STATE STATE STATE, STATE STATE,	=======
Command		Paramete	Y.	Defaul	t value i
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DE[FINE]	[	DL =	char ]		X * 00 *
	E	;BS =	char ]		X . 00 . I
li de la companya de	E	# M =	S(hort)/L(ong)	]	LONG
Ī		; PAGE =	(pl,ln,mg) ]		24,24,0 1
1	E	; DEFAULT	]		- 1
	NA. ADDV 1880 - 40	and where depth was also when when when when	t dies dan des		

#### Where:

DL BS M PAGE defines the character used as "delete line" for TTY's defines the character used as "backspace" for TTY's defines whether LONG or SHORT messages are desired defines the "page size" as:

pl = page length

ln = number of lines per page

mg = margin at the top of the page

The parameters are positional, the absence of a parameter is denoted by a comma. Missing parameters are calculated from the given values. The parentheses are mandatory. If only one parameter is given, the parentheses are not mandatory and the values are taken as pl, setting ln=pl and mg=0.

DEFAULT resets all parameters to their default values.

The ordering of the parameters is unimportant. Should a parameter be specified more than once, the last specification is taken as that valid.

The DEFINE command is handled by SCS507 module. The appropriate values are put in SCSTWA or DLNTWA.

E7 = DISPLAY Command (SCS506, VIE740, VIE741, DLN013, VIE803)

The DISPLAY command is used to obtain listings of logically related thesaurus terms or dictionary words in alphabetical order.

The abbreviated form D is also accepted as valid input.

In the FIND command references to the displayed terms can be made via the "T=" parameter.

The command format is:

#### Where:

CT asks for a display of logically related terms;

FT asks for a display of dictionary words in alphabetical order;

thrl = thesaurus relator, i.e. relator of a semantic
 field in the selected thesaurus to be displayed (as
 default ALL is assumed);

descriptor = main descriptor of the semantic field to be
 displayed (may be masked with \$ sign):

term = masked search term in the dictionary

<number> = a number indicating any display already made.
 If afterward a reference with T= is made in FIND
 command, it will be relative to this display.

When DLN013 is going to write results, if the DISPLAY function is active, returns to SCS506.

The SCS506 module reads temporary storage records written by DLN047, release them, and writes a "record 0" and one record for each term found.

At this point, in both cases, SCS506 shows a map where terms are sequentially numbered, and which contains relators and descriptors in case of CT display, and number of occurrences and words in case of FT display.

The user can move backward and forward using paging commands BACK, MORE e PAGE.

# EB - OWN Command (DLN002, DLN010)

The OWN command allows use of STAIRS/VS-TLS own commands.
The command format is:

sopens	and again take also have with other over some	te- nativi vistane eastay easta episov valgey edjene yappiv essay.	more wines when when when when when when when when	tidan rettan server steam enter wester-steam.	again again casan casan sana akan akan akan akan casan a	Selv. 4000 refer vasses vision, vision, vision, vision
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In order to return to the CCL environment, the user should enter the command ..CCL.

The OWN command is recognised by the DLN002 or DLN010 modules. In both cases, the SCSIND and SCSCMECV bits in the SCSFLAG are turned off and a normal STAIRS/TLS session can take place.

# B9 - STOP Command (DLN020)

The STOP command is used to log out of the system.

The command format is:

Same .	
-	STOP
-	表现 使热 电放 电热 电热 电光

This command is directly handled by the DLN020 module. Whenever the STOP command is given, the input string is converted into ..OFF NOCONT and the user logs out of the system.

# E10 - HELP Command (SCS505)

The HELP command gives the user general advice on the use of the system.

Also H and ? are accepted as valid inputs.

The command format is:

Section when could remain when allow the could be come about the could be come and the could be come about the could be come a	comp, datab menga provi Minn. Babel menga primas menga pinan menga benga banan menga banan saman saman dapat danan saman sempa danan saman menga banan menga banan menga banan menga banan saman danan banan menga banan banan saman danan banan menga banan banan saman banan	The state of the s
Command	Parameter	Default value
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H[ELP] or ?	[ command ]	
design district restrictions, sector district control control respect restrict values restrict restrict restrict restrict restrict respect restricts.	allow, notice vileges april states sprint, states april states, attack totals, attack vilege, states states attack	\$   Color   Co

Where:

command = any valid CCL command

If the command is issued without parameters, HELP or ? is assumed, and the system displays a list of allowed inputs.

SCS505 reads messages from CCLHELP file, and displays them. In case of wrong input,

HRLP HELP

is assumed.

If the output consists of more than one page, the user can move backward and forward using BACK, MORE and PAGE commands.

# E11 - BACK Command (DLN020)

During a DISPLAY, SHOW or HELP, the BACK command allows the user move backward to review a preceding page.

Also B is accepted as valid input.

The command format is:

NAME AND ADDRESS OF THE PARTY O	NATION OF THE PROPERTY AND STATE AND	THE COLUMN STATE AND STATE OF THE COLUMN STATE
Command	Parameter	Default value
which make make come come make make make make make about make power visit on	any diany (fine)	The same state and the same stat
B[ACK]	[ number ]	1
des det des	to date that the court, note that some some some some date, then done then court then some some some some	THE STATE SALE SHEET SHEET, SHEET

Where:

number indicates how many pages the user want to move backward The input is converted into:

p-n in case of 3270

and

doc-n in case of TTY

## E12 - MORE Command (DLN020)

During a DISPLAY, SHOW or HELP, the MORE command allows the user move forward to retrieve a next page.

Also M is accepted as valid input.

The command format is:

detosia	AND THE PARTY OF T			Colors and the second	er enem anne mega coper en C emper manis mone anno en	man again to make an again	- militar access communications to communications communications	T along the same a	had describe the second to	man, disperé wissen specie. Nati agrico, rejerço secondo		a jedominia
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Where:

number indicates how many pages the user want to move forward

The input is converted into:

p-n in case of 3270

and

doc-n in case of TTY

A "carriage return" is taken as:

MORE 1

# E13 - PAGE Command (DLN020)

During a DISPLAY, SHOW or HELP, the PAGE command allows the user to retrieve a specific page.

Also PA is accepted as valid input.

The command format is:

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Where:

number indicates the page the user want to retrieve.

The input is converted into:

P = n

## F - Command Implementation

F1 - Sign on

The sign-on procedure has been implemented by coding an ad hoc CICS transaction called CONN.

The input format is as follows:

CCL
CONN[ECT] CNUCE TLS [ user-password user-name]
STAIRS

Abbreviated forms of CONNECT (CONN, CONNE, CONNEC) are accepted as valid input. Node indication is mandatory (i.e. CNUCE).

If erroneous parameters are entered, the user is given a list of the available transactions:

SCST for information retrieval using CCL
AQTL for information retrieval using STAIRS/VS - TLS
AQUA for information retrieval using STAIRS/VS

and is requested to enter the code for the transaction he requires.

Valid parameters are CCL, TLS or STAIRS, optionally

User Guide 3.50

followed by the user password and name. (However, if STAIRS is entered, name and password are mandatory).

When one of these parameters is entered, the appropriate transaction is initiated.

If no parameter is entered, CCL is assumed by default.

when sign on procedure is complete, the user can either issue a command, or just press the "enter" key, thus obtaining a map which displays the permitted commands.

#### F2 - BASE Command

BASE selects the database (name or number) that is to be searched.

BAS is also accepted as valid input.

The command format is:

```
BAS[E] [ dbname ]
[ :P = password ]
[ :TL = thesaurus language ]
[ :THES = thesaurus name or LIST ]

or

BAS[E] ?
```

Where:

dbname name of database to be accessed (four characters)

P = indicates the database password, if any (max 8 characters)

TL= asks for a thesaurus in a specific language (by default E = English)

THES= specifies the thesaurus name (four characters)

or

THES=LIST asks for a list of available thesauri
BASE? asks for the name of the currently active database
and its structure (i.e. field labels)

Note that no parameter can be entered if the data base name is missing. If no parameter is entered, a list of available databases is shown, and the user is asked to select one of them.

If THES=<thname> is missing and a thesaurus is associated to the database, this thesaurus is automatically selected.

If T=NONE is specified in the DBCB, no thesaurus is selected.

## F3 - FIND Command

The FIND command is used to enter search terms and search statements.

The abbreviated form F is also valid input.

The command format is:

PETER AND AND AND MAKE AND AND MAKE AND	650° 4500. 4400. 4000° 2000. 400	r reservices assert, again and	w. mano- usery cance report a	etet eller vent silan eller ense elle	of restaur control con	or acces dolor some coop specie as			- 1
[ F[IND]	ident	ifier	[ ope	cator	ident	ifier	- Paris	* * *	witosom
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#### Where:

#### identifier =

- a) search term or code which may be truncated or restricted to a particular type (see later identifier modification);
- b) a literal search phrase, enclosed in double quotes (e.g. "black and white");
- c) a label identifying one or more search term displayed at the terminal (e.g. T= n [ TO m ]). If the operator TO is used, the terms are logically OR\*ed;
- d) a label identifying one or more previous search statements (e.g. S= n [ TO m]). Once again, if the operator TO is used, the terms are logically OB ed.

# and operator=

a) - any boolean logical connector (AND, OR, NOT).

Examples:

FIND smith AND wesson

FIND S=1 OR bond

FIND T=3 TO 5 AND S=2 TO 4 NOT butterfly

If brackets are used to ensure that a sequence of operators is executed in the intended sequence, the logic within brackes is executed first.

When the same logical operator is to be used to connect a number of terms, a shortened form of list notation can be used.

Example:

FIND linus AND lucy AND schroeder AND snoopy is equivalent to:

FIND (AND linus; lucy; schroeder; snoopy)

and FIND ? asks for search history (display of all preceding queries)

F3.1 - Identifier modification.

An identifier may be modified using a prefix or suffix to restrict searches to individual fields or to indicate special types of search term.

F3.1.1 - Prefix.

- A prefix is divided into a field (or data element) label and relational connector.
- The accepted relational connectors are:

= , < , > , <= , >=

For field labels which do not have linear ranges (e.g. free text) only the connector = is valid.

- With field labels with tree structured ranges, in particular for structured thesauri, standard connectors are:

DOWN UP NT BT

Other connectors may be defined by the user in the table VIET<thname>

F3.1.2 - Suffix

- The search statement can be further qualified using the suffix facility.

Example:

FIND <fl1> = computer/<fl2>,<fl3>
where <fl1>, <fl2>, <fl3> are field labels.

Note that search statements referring to field labels with linear ranges may not be qualified using the suffix facility. Therefore, a search statement may be qualified using prefix and suffix only if the relational connector '=' or a thesaurus relator are used.

## 3.1.3 - Prefix and parentheses

To avoid repeated use of a given prefix, a shortened form may be used.

Examples:

FIND <fl1> = butterfly AND <fl1> = daisy

is equivalent to:

FIND <fl1> = (butterfly AND daisy)

or:

PIND (butterfly AND daisy) /<fl>

and:

FIND AU = (schultz OR parker OR hart)

is equivalent to:

PIND AU = (OR schultz:parker:hart)

OI:

FIND (OR schultz:parker:hart)/AU

#### 3.2 - Adjacency connector

When searching free text, it is possible to specify that two words should occur in the same paragraph. This is achieved by entering:

#### F3.1.3 - Prefix and parentheses

To avoid repeated use of a given prefix, a shortened form may be used.

Examples:

FIND <fl1> = butterfly AND <fl1> = daisy

is equivalent to:

FIND <fl1> = (butterfly AND daisy)

or:

FIND (butterfly AND daisy) /<fl>

and:

FIND AU = (schultz 02 parker 02 hart)

is equivalent to:

FIND AU = (08 schultz:parker:hart)

or:

FIND (OR schultz:parker:hart)/AU

# P3.2 - Adjacency connector

When searching free text, it is possible to specify that two words should occur in the same paragraph. This is achieved by entering: <word1> ... <word2>

P3.3 - Truncation

The character masking symbol (%) is used to search on masked term.

Example:

FIND comput

will retrieve computational, computer, computing, etc.

P3.4 - Syntax limitations

- Field labels with linear range cannot be mixed with the others in one query.
- Backreference in queries with field labels having linear ranges is allowed. However, the backreferenced guerie(s) must be at the beginning. A logical AND between backreferenced gueries and entered identifiers is assumed, irrespectively the actually entered operator.

e.g. FIND S=1 TO 3 OR na=10 AND py>=79

is coverted into:

FIND S=1 TO 3 AND na=10 AND py>=79

## F4 - SHOW COmmand

SHOW causes the retrieved documents to be displayed at the terminal.

S is also assumed as valid input. The input is not positional. If a parameter should be entered more than once, the last value entered is held to be valid.

The command format is as follows:

Command	Parameter	Default value
S[HOW]	S = qn	last query   1 TO 5   1
	or [ *Fn ]	

#### Where:

= query number qn

= first document number in the list to be displayed 33

TE. = last document number in the list to be displayed

= increment document number (for skimming list) K

= field label (= STAIRS paragraph or formatted field) pn

= predefined format Fn

where "n" is a number ranging from 1 to 23. These numbers are in correspondence with formats \*D\* to \*Z\* that can be defined using the

DLNPCDEF macro of STAIRS/VS-TLS.

#### F5 - PRINT Command

The PRINT command is used to have retrieved documents printed on the offline printer or on a private print queue.

The abbreviated form P is also valid input.

The input is not positional. If a parameter should be entered more than once, the last value entered is held to be valid.

The command format is as follows:

Command	Parameter	Default value
P[RINT]	S = gn ] [;R = n [ TO x ] ] [;I = k ] [;F = p1:p2;]	last query 1 TO 50 1
	<pre>( :Fn ]   [ :D = OFFLINE ] or   [ DISK = prtq ]</pre>	D = OFPLINE

```
Where:
```

gn = query number

= first document number in the list to be displayed

= last document number in the list to be displayed

k = increment document number (for skimming list)

pn = field label (= STAIRS paragraph or formatted field)

Fn = predefined format

where "n" is a number ranging from 1 to 23. These numbers are in correspondence with formats "D" to "Z" that can be defined using the

DLNPCDEF macro of STAIRS/VS-TLS.

OFFLINE asks for offline printing of documents

DISK = prtg asks for printing of documents on private data set, identified as "prtg" in DCF

#### F6 - DEFINE Command

The DEFINE command is used to assign values to specific parameters of the system.

The abbreviated form DE is also valid input.

The command format is as follows:

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Command	Parameter	Default value
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DE[FINE] [	DL = char ]	X * 00 * 1
	:BS = char ]	X . 00 . 1
	; M = S (hort)/L (ong)	] LONG
	; PAGE = (pl, ln, mg) ]	24,24,0
i .	:DEFAULT ]	spency
THE PARTY NAME AND ADDRESS ASSESS. ASSESS AS	BBDS BBDS MITT TOUT TOTAL SERV MATE VARIE ASSES	are referen soon. Heter desten model nicke, soons daare viside agges, gazes, gazes, dakes model stoods, assent,

#### Where:

DL defines the character used as "delete line" for TTY's
BS defines the character used as "backspace" for TTY's
M defines whether LONG or SHORT messages are desired
PAGE defines the "page size" as:

pl = page length

In = number of lines per page

mg = margin at the top of the page

The parameters are positional, the absence of a parameter is denoted by a comma. Missing parameters are calculated from the given values. The parentheses are mandatory. If only one parameter is given, the parentheses are not mandatory and the values are taken as pl,setting ln=pl and mg=0.

DEFAULT resets all parameters to their default values.

The ordering of the parameters is unimportant. Should a parameter be specified more than once, the last specification is taken as that valid.

#### F7 - DISPLAY Command

The DISPLAY command is used to obtain listings of logically related thesaurus terms or dictionary words in alphabetical order.

The abbreviated form D is also accepted as valid input.

In the PIND command references to the displayed terms can be made via the "T=" parameter.

The command format is:

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i D[	ISPLAY]	[CT	[=]	[thrl]	Č	escriptor	- Property	Appendix
								None
Standard	dome	[FT]	I = J	term	[TO	term2]		Spinoto
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#### Where:

CT asks for a display of logically related terms;

FT asks for a display of dictionary words in alphabetical order:

thrl = thesaurus relator, i.e. relator of a semantic field in the selected thesaurus to be displayed (as default ALL is assumed);

descriptor = main descriptor of the semantic field to be displayed (may be masked with \$ sign);

term = masked search term in the dictionary

TO <term2> identifies the last free text word to be displayed

<number> = a number indicating any display already made.
 If afterward a reference with T= is made in FIND
 command, it will be relative to this display.

? asks for display of the last successfull display. If afterward a reterence with T= is made in FIND command, it will be relative to this display.

## A map is showed containing:

- a) relator and words in case of CT display;
- b) # of occurrences and words in case of PT display

The user can move backward and forward using paging commands BACK, MORE and PAGE.

## F8 - OWN Command

The OWN command allows use of STAIRS/VS-TLS own commands.
The command format is:

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In order to return to the CCL environment, the user should enter the command ..CCL.

# P9 - STOP Command

The STOP command is used to log out of the system.

The command format is:

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User Guide 3.67

### P10 - HELP Command

The HELP command gives the user general advice on the use of the system.

Also H and ? are accepted as valid inputs.

The command format is:

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Monapole	H[ETh] or 3		comman	ıđ ]	HELP	-
veriables	\$886-\$880 ABST \$500-\$500-\$500-\$400. ASST. ASST. \$500 ABST. \$500-\$500. ASST. \$500. ASST. \$500-\$500.	w **** •	with which ender come when come	e-agus, agite etter etter exer sinir etter	esservisitery esservestan, esserv, tester esserv estaro esservi esservi estaro	-breason-

Where:
command = any valid CCL command

If the command is issued without parameters, HELP or ? is assumed, and the system displays a list of allowed inputs.

If the output consists of more than one page, the user can move backward and forward using BACK, MORE and PAGE commands.

User Guide 3.68

# F11 - BACK CORBANĂ

During a DISPLAY, SHOW or HELP, the BACK command allows the user move backward to review a preceding page.

Also B is accepted as valid input.

The command format is:

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Where:

number indicates how many pages the user want to move backward

## F12 - MORE Command

During a DISPLAY, SHOW or HMLP, the MORE command allows the user move forward to retrieve a next page.

Also % is accepted as valid input.

The command format is:

2,533,000	waters than the state of the st	mana anno anno anno anno anno anno anno	n. NOTICE TRANSP. Making alongly algebra wagging. The MERROY CONTROL OF THE AMERICAN AMERICAN COMPANY.	and the second distance and the second distance of	encoders, determinant team, state, and team and the determinant team,
district	Command	Par	ameter		Default value
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Where:

number indicates how many pages the user want to move forward

A "carriage return" is taken as:

MORE 1

User Guide 3.70

# F13 - PAGE Command

During a DISPLAY, SHOW or HELP, the PAGE command allows the user to retrieve a specific page.

Also PA is accepted as valid input.

The command format is:

Appe, sept offer east spay opposition, skell deler et apper sept dear feet spay were filled about Apper 5	ger eigen deut Staff, führt deut einen schaft deut deut einen der für deut deut deut deut deut deut deut deut	is work about family forms and approximate, colors family on A special forms and a series of the ser	the days the party was been and	the reason of the Court with a court with the court
Command	Parameter		Defaul	Lt value
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PA[GE]	[ number	] cui	crent p	page + 1
	and spin was upon their state state state state state state state, state state state state state state state state	In early some years which some differ filler differ on		W 400 400 500 500 400 400 600

Where:

number indicates the page the user want to retrieve.