

Consiglio Nazionale delle Ricerche

Common Command Language

Support on STAIRS/VS - TLS

User Guide

R. Bartoli - S. Lippi - G. A. Romano - O. Signore

178

CNUCE

A cura di: R. Bartoli (CNUCE)
S. Lippi (IBM, Italy)
G. A. Romano (CNUCE)
O. Signore (CNUCE)

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Istituto del Consiglio Nazionale delle Ricerche

Table of contents

Foreword	1
B. Correspondence table	2
C. Command Description	4
C1. Sign on	5
C2. HELP Command	7
C3. BACK Command	8
C4. MORE Command	9
C5. PAGE Command	10
C6. DEFINE Command	11
C7. STOP Command	13
C8. OWN Command	14
C9. BASE Command	15
C10. DISPLAY Command	17
C11. FIND Command	19
C12. SHOW Command	25
C13. PRINT Command	26
Appendix A: Field labels	28

A. Foreword

The EURONET CCL (Common Command Language) was devised to overcome the problems which may arise on encountering unfamiliar commands when using more than one retrieval system.

As many of the functions provided by the different information retrieval systems are similar, these shared functions have been standardised in the CCL.

A contract was stipulated between the EEC and CNUCF for the implementation of CCL on STAIRS/VS.

This publication describes the implementation made under the terms of the contract and already distributed to the EURONET hosts which are using STAIRS/VS - TIS.

The reader is supposed to be familiar with STAIRS/VS and TIS environment.

B. Correspondence Table

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

In order to build this table, the CCL01 program must be executed according to the following sample JCL:

```
//BLDTBI JOB .....
//JOB LIB DD DSN=SCS.TEST.LOALLIB,DISP=SHR
//          DD DSN=SYS1.PLOLINK,DISP=SHR
// EXEC PGM=CCL01,PARM='DB=INIS'
//SYSPRINT DD SYSOUT=A
//HDMTAE DD DSN=&A,DISP=(NEW,PASS),DCB=SCS.TEST.SOURCE,SPACE=(CYL,3),
//          UNIT=SYSDA
//INPUT DD DSN=SCS.TEST.SOURCE(INISFORM),DISP=SHR
//MASTER DD DSN=TLS.OPER.DBCE,DISP=SHR,UNIT=SYSEA,VOL=SER=VS1R6F
//FFFILE DD DSN=TLS.OPER.FFILE,DISP=SHR,UNIT=SYSDA,VOL=SER=VS1R6F
// EXEC SCSC,M=CCLINIS
//DLNPPR.SYSIN DD DSN=&A,DISP=OLD
```

The format of the 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 the (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 a parameter.

C. Command Description

All the commands which have been implemented are described in this chapter. For each command is given a description of the acceptable parameters and their significance.

Certain factors which are common to the entire implementation are listed here below:

- the implementation supports terminals of the 3270 type in addition to TTY type terminals;
- on TTY type terminals, the system advises when it is ready to receive input by sending '/?';
- except when the system makes specific queries, each input is interpreted as a command. STOP is always interpreted as a command;
- all the commands can be preceded by a stop (.), which indicates that in the execution of that command the SHORT dialog is preferred (experienced user).

C1 = Sign on

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

The input format is as follows:

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

Abbreviated forms of CONNECT (CCNN, 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. For CCL or TLS these parameters are followed optionally by the user password and name. If STAIRS is entered, name and password are mandatory.

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

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

C2 - HELP Command

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

H and ? are also accepted as valid inputs.

The command format is:

Command	Parameter	Default value
H[ELP] or ?	[command]	HELP

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 incorrect input is given:

HELP HELP

is assumed.

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

C3 - BACK Command

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

B is also accepted as valid input.

The command format is:

Command	Parameter	Default value
B[ACK]	[number]	1

Where:

number indicates how many pages the user want to move backward

The input is converted into:

p-n for 3270

and

doc-n for TTY

C4 - MORE Command

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

M is also accepted as valid input.

The command format is:

Command	Parameter	Default value
M[ORE]	[number]	1

Where:

number indicates how many pages the user want to move forward

A "carriage return" is understood as:

MORE 1

The input is converted into:

p-n for 3270

and

doc-n for TTY

C5 = PAGE Command

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

PA is also accepted as valid input.

The command format is:

Command	Parameter	Default value
PA[GE]	[number]	current page + 1

Where:

number indicates the page the user want to retrieve.

The input is converted into:

P=n

C6 - 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:

Command	Parameter	Default value
DE[FINE]	[DL = char]	X'00'
	[;BS = char]	X'00'
	[;M = S(hort)/I(ong)]	LCNG
	[;PAGE = (pl,ln,mg)]	24,24,0
	[;DEFAULT]	

Where:

DL defines the character used as "delete line" for TTY's
 ES defines the character used as "backspace" for TTY's
 M defines whether LCNG or SHORT messages are desired
 PAGE 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 order of the parameters is unimportant. Should a parameter be specified more than once, the last specification is taken as that valid.

C7 - STOP Command

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

The command format is:

```
|-----|  
| STOP  |  
|-----|
```

Whenever the STOP command is given, the user logs out of the system.

C8 - OWN Command

The OWN command allows STAIRS/VS-TLS own commands to be used.

The command format is:

```
|-----|  
| CWN   |  
|-----|
```

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

C9 = EASE Command

EASE selects the database that is to be searched.

BAS is also accepted as valid input.

The command format is:

```

-----
| EAS[E]      [ dbname ]
|              [ ;P   = password ]
|              [ ;TL  = thesaurus language ]
|              [ ;THES = thesaurus name or LIST ]
|-----
|
|      CI
|-----
| 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)
CI
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 (by name or number).

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.

If essential parameters should be missing (e.g. the database name, the password or the thesaurus identification) a normal TIS 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 EASE ?, the name of the database in which the user is operating and a list of field labels are displayed.

C10 = 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 FIND command references to the displayed terms can be made via the "T=" parameter.

The command format is:

D[ISPLAY]	[CT [=] [thrl] descriptor]
or	[FT] [=] term
or	<number>
or	?

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 later on during the session a reference with T= is made in a FIND command, it will be relative to the display which is indicated by <number>
 ? asks for a display of the last successful

display. If later on during the session a reference with T= is made in a FIND command, it will be relative to the last successful display.

As a result of this command, a map is displayed with sequentially numbered terms, containing relators and descriptors if there has been a CT display, or number of occurrences and words if there has been a FT display.

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

C11 - 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:

```

|-----|-----|
| F[IND] | identifier [ operator identifier ] ... |
|-----|-----|
|         | or |
|-----|-----|
| F[IND] | ? |
|-----|-----|

```

Where:

identifier =

- a) - 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 terms displayed at the terminal (e.g. T= n [TO m]). If the operator TC 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 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 the brackets 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 a list of the previous searches

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 terms.

E3.1.1 - Prefix.

- A prefix is divided into a field (or data element) label and a 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 <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 prefixes and suffixes 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 <f11> = butterfly AND <f11> = daisy  
is equivalent to:
```

```
FIND <f11> = (butterfly AND daisy)
```

or:

```
FIND (butterfly AND daisy)/<f11>
```

and:

```
FIND AU = (schultz CB parker OR hart)
```

is equivalent to:

```
FIND AU = (OR schultz;parker;hart)
```

or:

```
FIND (OR schultz;parker;hart)/AU
```

E3.2 - 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 masked terms.

Example:

FIND compu\$

will retrieve computational, computer, computing, etc.

E3.4 - Syntax limitations

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

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

is converted into:

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

C12 - 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 = gn]	last query
	[;R = n [TO m]]	1 TO 5
	[;I = k]	1
	[;F = p1;p2;...]	
	or	ALL
	[;Fn]	

Where:

gn = query number
n = first document number in the list to be displayed
m = 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 the formats "D" to "Z" that can be defined using the DLNPCDEF macro of STAIRS/VS-TLS.

C13 - 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 = qn]	last query
	[;R = n [TC m]]	1 TC 50
	[;I = k]	1
	[;F = p1;p2;...]	
	or	ALL
	[;Fn]	
	[;D = OFFLINE]	
	or	D = OFFLINE
	[DISK = prtq]	

Where:

- qn = query number
- n = first document number in the list to be displayed
- m = 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 the formats "D" to "Z" that can be defined using the DLNPCDEF macro of STAIRS/VS-TLS.
- D = OFFLINE asks for offline printing of documents
- DISK = prtq asks for printing of documents on private data set, identified as "prtq" in DCT

Field labels

(quoted from A.E. Negus and A.E. Snowden)

AU author
TI title
SC source
CC classification code (other specialised codes
are generally database dependent)
CT controlled term (i.e. thesaurus term)
UT uncontrolled term (i.e. free indexing)
FT free text term
LA language
NR report number
CS corporate source
AF author affiliation
NP patent number
CP patent country
CY publication country
JT journal title
JA journal abbreviation
CO CODEN
SS ISSN
SE ISEN
AB abstract

NA abstract number
ND document number
NC contract number
ED computer entry date
PD publication entry date
PY publication year
DT document type
RT reference
RA referenced author
RI referenced inventor
RJ referenced journal
RP referenced patent
CF Chemical Abstracts Registry Number
WL Wiswesser line notation

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