

*SELCOPY*

**SELCOPY Rel 2.00 – New Features**

# SELCOPY 2.00 New Features

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# **SELCOPY Rel 2.00 – New Features**

Information in this New Feature List, reflecting differences between **SELCOPY Rel 2.00** and **SELCOPY Rel 9.80**, is subject to alteration at the sole discretion of Compute (Bridgend) Ltd.

The numeric prefix on each heading indicates the Release Number introducing the change.

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# IMPORTANT CHANGES

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## 200: Expiry Date

SELCOPY's traditional hard coded expiry date has been removed and replaced with a **password mechanism** which is based on the user's **Company name/location** and supplied **Operational Date Range(s)**.

Four weeks prior to the end of an operational date range, **Rel 2.0** will issue the following **warning** message to the operator's console on **every** execution of SELCOPY:

Another date range and password will be distributed before the end date of the current operational range. New releases of the software will be distributed periodically via CD and made available via download from CBL's web site at <http://www.cbl.com>.

Licence information is accessed by SELCOPY via one or both of the following methods:

1. **CBLNAME** Extension fields.
  2. The **SELCNAM** control file. (recommended method)
- 

## 200: CBLNAME Extensions

In order to accommodate the new licensing details and **SELCNAM** control file (see below), extensions have been added to the **CBLNAME** module for each CBL licensed product.

Each extension has a variable length and contains fields for the products' operational date range(s), user specific password and information used for dynamic allocation of the new SELCNAM file.

Licence information **must** be coded on the **SITE**, **RANGE** and **PASS OPTIONS** in SELCNAM **or** in these CBLNAME fields.

Unless specified on the SITE parameter in SELCNAM, the CBLNAME **CBLHEAD** field, which, for existing SELCOPY users contains the company name and location as inserted by the user, must be updated so that it contains the site details as supplied by CBL.

Note that the new site information will be reflected in the heading line generated automatically at the top of each page of SELCOPY printed output. This is true whether it is specified in CBLHEAD or on the SITE parameter in SELCNAM.

The site name distributed to all users is restricted to between 20 and 36 characters in length. Since the CBLHEAD field can accommodate up to 55 characters, different headings may still be achieved by varying the content of positions 37 to 55.

The password supplied by CBL for normal operation is based on the site and date range information. Therefore, these details must match those supplied by CBL **exactly**. In particular, the site details must respect **character case** and **embedded blanks**.

Please refer to the separate document entitled "**SELCOPY Installation Guide**" for comprehensive instructions on how to update and maintain CBLNAME.

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## 98P: The SELCNAM file

The SELCNAM file was originally introduced as the AS/400, Unix and PC equivalent to **CBLNAME** on the mainframe.

It has since been supported in mainframe SELCOPY, initially to provide the password based mechanism for Year 2000 testing on dates beyond the traditional expiry date.

Use of SELCNAM is recommended as it is the vehicle by which future new SELCOPY default options will be defined. For **VSE**, existence of a SELCNAM data set is **mandatory** (see "**Important Note**" below).

It is a more convenient method of defining current system default options for SELCOPY and is an alternative to changing the CBLNAME phase/load module. However, because SELCNAM cannot control all system options, CBLNAME **must still be available** to SELCOPY at execution time.

In earlier releases of SELCOPY, to change a systemwide default parameter the user would have to update the CBLNAME source assembly file then ASSEMBLE and LINK it. Now, the default option may be specified on a SELCOPY **OPTION** statement in SELCNAM. Since SELCNAM is an editable plain text file having the same format as a normal SELCOPY control card file, it is therefore more easily maintained than CBLNAME.

The only control cards permitted in SELCNAM are **OPTION** statements, where, if an option is duplicated, the last one processed is effective. The only exception to this is the **RANGE** option which may be repeated to define multiple date ranges that are cumulative and mandatory for SELCOPY's password processing. (See **RANGE** option below).

With the exception of **OPTION HEAD** and **OPTION REPORT HEAD**, any supported user option may be coded in the SELCNAM file and will override the equivalent option field in CBLNAME. e.g. **OPTION SEP=';**' in SELCNAM will override the default separator character in CBLNAME field **CBLCSEP** (supplied by CBL containing the character '!').

If the user specific licence details for company name/location, operational date range(s) and password are not coded in **CBLNAME**, then the **SITE**, **RANGE** and **PASS** option parameters are **mandatory**. These parameters are discussed in detail below.

**/\*** in pos 1,2 of any record in SELCNAM will terminate SELCOPY's checking for further option statements. Thus the file may contain additional comment records, without incurring any processing overhead.

SELCNAM may exist as one of the following:

For MVS, it may be cataloged as a physical sequential data set or as a member of a PDS/PDSE.

For VSE, as a SAM file only.

For CMS, as a minidisk file only.

SELCOPY will process SELCNAM as follows:

1. If the filename 'SELCNAM' already exists via a DD, DLBL or FILEDEF statement, then SELCOPY will process control statements from this data set.
2. If a DSN is specified in the **CBLNXDSN** field of CBLNAME (See **CBLNAME Extensions** above), then SELCOPY will attempt to dynamically allocate it with the filename 'SELCNAM' for subsequent control card processing.  
**VSE** users should also have the volume on which the DSN is defined, specified in the **CBLNXVOL** field of CBLNAME.
3. If no default DSN exists in the **CBLNXDSN** field of CBLNAME, then SELCOPY will attempt to allocate the filename 'SELCNAM' to the data set 'SELCOPY.NAM'.  
 For **VSE**, SELCOPY will assume the data set resides on volume **SYSWK1**.  
 For **CMS**, dynamic allocation takes place for the file 'SELCOPY NAM \*'.

4. If no SELCNAM DSN is found or licence options (SITE, RANGE and PASS) are missing from SELCNAM, then the licence information is obtained from the **CBLNAME** module.

## Important Note

For SELCOPY on **VSE** only, failure to OPEN the SELCNAM data set will result in error message "**43011 NO FORMAT 1 LABEL FOUND**" and the job cancelled. Therefore, the SELCNAM data set **must** exist, even if it is empty.

---

## 98P: SITE='string'

**SITE** and its argument, may be coded on an **OPTION** statement in the **SELCNAM** file only. It specifies the user's company name and location as supplied by CBL for successful execution of SELCOPY. The argument is restricted to between 20 and 36 bytes in length and replaces the first 36 bytes of the company details in the header record of each SELCOPY printed output page.

The password supplied by CBL for normal operation is based on the information specified on the **SITE** and **RANGE** parameters. Therefore, the SITE argument must match that supplied by CBL **exactly**, respecting **character case** and **embedded blanks**. If not, SELCOPY will terminate with the following message:

Note that, unless the site details are already defined in the CBLNAME load module, use of the SELCNAM file and SITE option is **mandatory**.

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## 98P: PASS=x'nnnn,nnnn,nnnn,nnnn'

**PASS** and its argument x'nnnn,nnnn,nnnn,nnnn' may be provided as a parameter on an **OPTION** statement in the **SELCNAM** file only. It specifies a unique 8-byte hexadecimal password supplied to the user by CBL for normal execution of SELCOPY. The password is based on the information specified on the **SITE** and **RANGE** parameters which are also supplied by CBL.

Note that, unless the password is already defined in the CBLNAME load module, use of the PASS option is **mandatory**.

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## 98P: RANGE=yyyy/mm/dd–yyyy/mm/dd

**RANGE** and its argument **yyyy/mm/dd–yyyy/mm/dd**, may be coded on an **OPTION** statement in the **SELCNAM** file only. It specifies a date window within which the SELCOPY program will function normally.

The password supplied by CBL is based on the information specified on the **SITE** and **RANGE** parameters. If more than one RANGE parameter has been provided by CBL in conjunction with the password, then it is essential that they are **all** coded once in the SELCNAM file on one or more OPTION statements.

If your machine's system date is outside the operational ranges, SELCOPY will terminate with the following message:

Note that, unless the date ranges are already defined in the CBLNAME load module, use of the RANGE option is **mandatory**.

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## 200: PRINT output changes for TYPE=B,C,D,M

**TYPE=B**, **TYPE=C**, **TYPE=D** and **TYPE=M** printing now include the following additional hex characters as printable:

In particular, note that **TYPE=M** printing will no longer treat **lower case** alpha as unprintable.

If it is still required to treat **lower case** alpha as unprintable, please use **TYPE=MP** where mixed printing (Char and Hex) is biased towards **Packed Decimal** data.

**TYPE=MP** has also been changed to include the above additional characters as printable, with the exception of **X'79'** which remains as **hex** because it is a valid packed decimal value.

**TYPE=MC** has also been changed to include the above additional characters as printable, and has now become **identical** to **TYPE=M** printing. **TYPE=MC** is therefore redundant.

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## 200: ASCII/EBCDIC Translation changes

The translate tables for **ASCII/EBCDIC** conversion using the **CVAE** and **CVEA** statements have been changed to bring into line with IBM's PCOPY utility for the P/390, PCI/390 and R/390 machines, which host the IBM mainframe operating systems, OS/390 (MVS), VSE and VM, on PC or Unix architecture.

SELCOPY for the mainframe now matches the PC and unix versions with regard to CVAE and CVEA, and accommodates the Euro Currency Symbol, **X'9F'** for EBCDIC platforms, and **x'80'** for ASCII platforms (Unix and PC).

A major benefit of PCOPY's tables is that translation is **reversible** without loss of integrity of the data. The **CVAE** statement will no longer translate 128 of the 256 EBCDIC characters to the same value, **X'1A'** (Control-Z), in ASCII.

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## 98P: DIR input for VM and VSE – 4-digit year

SELCOPY's **DIR** input feature, returning a formatted directory record for the VM/CMS and VSE operating systems, has been **changed** by introducing the **century** indication into all dates reported.

A 4-digit year is the **default**.

See **Y2** and **Y4** parameters below for controlling century reporting for DIR input.

For **VM/CMS**:

Only 1 date field is reported, (Date last updated). All fields to the right of this field are shifted right by 2 bytes. The LRECL becomes 81, instead of 79 as on previous releases.



For **VSE**:

2 date fields are reported, (Date Last Updated, and Date Created.)

All fields to the right of Date–Last–Updated are shifted right by 2 bytes.

All fields to the right of Date–Created are shifted right by 4 bytes. The LRECL becomes 100, instead of 96 as on previous releases.

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## **200: PAGEWIDTH=nnn excludes ASA character**

The **PAGEWIDTH** argument no longer includes the ASA print control character in column 1 and defines the number of bytes in the **printable data portion only**.

Thus, the previous default of **PW=133** becomes **PW=132** matching the AS/400, PC and Unix platforms.

The actual I/O command for printing is restricted to 133 characters. In previous releases, coding **PAGEWIDTH>133** would cause truncation of the page number and date fields in the header information. This has been **changed** so that coding **PAGEWIDTH>132** (SYSIN/SYSLST output > 133 with ASA) will force the date and page number to be right adjusted at output column 133. Thus no truncation will occur.

Similarly, coding a narrow pagewidth would suppress the date field. This has been **changed** so that the date field will be maintained for all pagewidth values and will overwrite the company site details if necessary.

The position of the **RECORD LENGTH** column, which appears on the right hand side of **PRINT** output, is no longer influenced by the **PAGEWIDTH** value but is moved in sympathy with **DATAWIDTH**.

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# NEW FACILITIES

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## 200: DATAWIDTH support for printing

### DW

The **DATAWIDTH** parameter was first introduced in SELCOPY for **AS/400**, **Unix** and **PC** platforms.

**DATAWIDTH** (abbreviation **DW**) may be specified on an **OPTION** or **PRINT** statement to define the number of bytes of data that are printed on 1 line of SELCOPY's output to the **PRINT** file before wrap occurs on to the next line. Thus, extremely useful for printing in portrait.

The **maximum** and **default** **DATAWIDTH** value is 100 bytes, the **minimum** is 10 bytes.

The position of the **RECORD LENGTH** column in the **PRINT** block, is always 2 bytes to the right of the printed data and no longer truncated for narrow **PAGEWIDTH** values.

Example: **PRINT** with **DATAWIDTH**

---

## 98P: SELCOPY for OS/2, HP Unix and AS/400

The SELCOPY program is now available on the **OS/2**, **HP Unix** and **AS/400** platforms.

Please contact CBL for pricing information.

Other platforms on which SELCOPY is currently available are:  
PC/DOS, MSDOS, Sun Solaris unix, DEC Alpha unix and IBM AIX unix.

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## 98P: OPT Y2/Y4 for VM and VSE – 2 or 4–digit year

The **Y2** and **Y4** parameters may be coded on an **OPTION** statement, or on a **READ** statement, but only affect **DIR** input for VM/CMS and VSE.

**Y4** (the **default**) uses a 4–digit year for formatted dates on **DIR** input.

**Y2** will force use of a 2–digit year, as on previous releases.

On an **OPTION** statement:

**Y2** or **Y4** will force use of a 2 or 4–digit year on all subsequent use of **DIR** input.

**OPTION Y4** should only ever be required if **Y2** were set via an **OPTION** statement in **SELCNAM**, thus effecting all executions, and you wish to revert to the default, **Y4**.

On a **READ** statement:

**Y2** or **Y4** will force use of a 2 or 4–digit year for that logical file only.

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## 98P: CONTMAX

Use of SELCOPY for processing a **DB2** database can result in the requirement for literals defining complicated **SQL** statements which exceed the 72–byte limit on the size of SELCOPY control cards.

## SELCOPY Rel 2.00 – New Features

The **continuation record** symbol, "\", (Backslash without the quotes), allows long records to be built up from multiple control cards, up to a **default maximum** of 4096 bytes.

**OPTION CONTMAX=n** may be used to **override** the default maximum length of a logical control card when using continuation records.

ERROR 154 will be issued if CONTMAX is not a valid positive decimal number or if the CONTMAX buffer has already been allocated, due to encountering a continuation record symbol.

**Note:** It is recommended that continuation records are **not used** in the SELCNAM file because the first continuation record encountered will cause allocation of a continuation record buffer, which by default will be length 4096.

This will be unnecessary and wasteful on most SELCOPY runs, (which do not use continuation records), and **wrong** for SELCOPY runs which require continuation records in excess of 4096.

For long **OPTION** statements in the SELCNAM file, break it up into several OPTION statements. e.g.

```
OPT SITE='Your installation name – location'
```

```
OPT RANGE='1900/01/01–2001/06/11'
```

```
OPT PASS=x'0123,4567,89ab,cdef'
```

---

## 200: POS UXREPLYL

**POS UXREPLYL** refers to a 4 byte binary field within SELCOPY's storage containing the length of data received from the last **LOG REPLY** operation.

Initially this field contains zeroes and has a maximum value equal to the length of the last REPLY INTO field.

Example: LOG REPLY with **POS UXREPLYL**

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## 98P: Century 50/50 Split

SELCOPY will detect a **Y2000 Enabled** operating system and trust its date information.

For **Non–Y2000 Enabled** operating systems, the system date is determined based on a 50/50 split, treating the years 01–49 as being in the 21st century, and the years 50–99 as being in the 20th century.

A **CBLNAME** option has been introduced allowing an **override** facility to force use of the **50/50** technique regardless of the capabilities of the operating system.

**Note:** The **CBLC5050** switch has only been introduced as an additional safety feature. It is not anticipated that its use will ever be required.

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## 200: HTML SELCOPY Manual

The current SELCOPY User Manual is now available in a softcopy HTML format via download or viewable online at the CBL web site <http://www.cbl.com>.

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## 98P: New Error Messages

### 001 UNSUPPORTED FOR THIS PLATFORM

A control word or parameter has been encountered which is valid on versions of SELCOPY for other platforms, but not on this one. Normally, such occurrences are tolerated and silently ignored. However, in this case, logic problems may arise which will need attention. e.g. Use of: EOL='string' on SELCOPY for the IBM mainframe. Use of: EXIT modname when not on an IBM mainframe.

### 153 INVALID OPTION IN "SELCOPY.NAM" FILE

The **SITE** arg cannot exceed length 36. Minimum length is 20.

The **PASS** arg must be length 8.

The **RANGE** arg must be in the format: **RANGE='yyyy/mm/dd-yyy/mm/dd'**

The **PASS** arg, (provided by CBL for each installation), must match with the SITE and RANGE args used.

### 154 INVALID CONTMAX OR ALREADY SET

The CONTMAX arg, n, is not a valid positive decimal number, or the CONTMAX buffer has already been allocated, due to encountering a continuation record symbol.

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# OTHER CHANGES

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## 200: Changes to Distribution File

Please refer to the separate document "**SELCOPY Installation Guide**" for details on changes to the product distribution material.

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## 200: SYSIN geometry restriction relaxed for MVS and CMS

The 72-byte length restriction for SELCOPY control statements has been extended to be equal to the LRECL of the SYSIN control card input, up to a maximum of **256 bytes**.

For **RECFM=V** input, the LRECL value includes a 4-byte Record Descriptor Word (RDW) so the maximum control statement length will be the lesser of the allocated maximum LRECL minus 4, or 252 bytes. Because the RDW is ignored by SELCOPY for RECFM=V SYSIN, no RDW is returned to the user for **READ FILE=CARD** records.

Similarly, any **sequence numbers** that exist in the last 8 bytes of the record are included in the LRECL value and reduce the control card length maximum value accordingly.

Note that sequence numbers are also ignored by SELCOPY syntax checking.

---

## 200: Changes to SELCOPY output listing

The following are alterations to the way in which SELCOPY formats its output listing:

### Blank lines printed instead of ASA char '0'

A non-blank output listing record with a blank record preceding it is no longer prefixed with the ASA print control character '0', meaning space 2 lines and print, and the blank record removed. Instead the blank record is maintained and the ASA character removed.

This means that the listing is now more similar in appearance to that of SELCOPY on AS/400, Unix and PC.

The ASA character '1', meaning skip to top of page and print, is still written at the start of each SELCOPY output header record. (Compare with the **ASCII** page throw character **X'0C'** on SELCOPY Unix and PC listings).

## **Operating System and jobname are no longer underlined in header**

The Operating system, TSO/CMS logon userid and jobname are no longer underlined with '-' minus (hyphen) characters.

See **PAGEWIDTH=nnn excludes ASA character** for other heading changes based on PAGEWIDTH vaules.

## **RECORD LENGTH column on Print output moved 4 positions left**

The **PRINT** statement output block has been updated so that the column headed '**RECORD LENGTH**' to the right of the printed data is shifted 4 bytes to the left. This matches print output blocks in SELCOPY for AS/400, Unix and PC.

## **Data scale at bottom of Print output now uses 1,2,3 etc. for tens positions**

The dots that form a scale at the foot of each page of **PRINT** output data has been updated so that the **tens** positions contain ascending numerics 0, 1, 2, 3, etc. instead of being all zeroes.

This is especially useful when the pagedepth is sufficiently large that the 2 records containing the scale at the top of the page of printed data (with tens positions 10, 20, 30, etc.) are not visable when browsing output at the bottom of the page.

## **Expiry Date shown at end of report now uses International Date format**

The international date format, '**yyyy/mm/dd**', is used to display the expiry date in the output listing footer instead of the '**dd mmm yyyy**' format used in previous releases. e.g.

See **DATAWIDTH** and **POS UXREPLYL** above for examples of new SELCOPY output listing.

---

## **200: Dynamic Alloc DSN literal no longer implies DEFER**

**DEFER** is no longer the default for dynamically allocated data sets where **DSN** is provided as a string literal. Deferring the open until execution is unnecessary, unlike providing a truly dynamic DSN via a field in the workarea which may not be resolved until execution time.

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## **Zaps Applied since 9.80**

The following zaps for **SELCOPY Rel 9.80** have been applied at source:

The following zaps for **SELCOPY Rel 9.8P** have been applied at source: