Title:

RC3600 Data Entry Release 2.

User's Guide for Supervisorprogram COPY and Corrections
for User's Guide Part 1 and 2 and Supervisor Programming
Guide.

Keywords:

MUS, DOMUS, DATA ENTRY, CORRECTIONS, SUPERVISOR PROGRAM, COPY

Abstract:

This manual describes how to use the supervisorprogram COPY.

This program is used to create a new batch, by copying one or more existing batches.
Corrections to the User's Guide part 1 and part 2 and the Supervisor Programming Guide.

CONTENTS   PAGE

1.   <u>INTRODUCTION.</u>   1.

This manual describes how to use the supervisor program COPY.
Further, this manual describes some changes in the manuals:
RC3600 DATA ENTRY RELEASE 2 - USER'S GUIDE PART 1 and PART 2,
and the SUPERVISOR PROGRAMMING MANUAL.

The description of supervisor program COPY in section 2 can be
inserted, instead of page 27, in the:

        RC3600 DATA ENTRY RELEASE 2

        USER'S GUIDE PART 2

        RCSL: 43-GL4796

        EDITION: JUNE 1977.

The corrections to BATCH DESCRIPTION in section 3 can be in-
serted, instead of page 21 to 25, in the:

        RC3600 DATA ENTRY RELEASE 2

        USER'S GUIDE PART 1

        RCSL: 43-GL4795

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The corrections in section 4 can be
inserted in the:

        RC3600 DATA ENTRY RELEASE 2

        SUPERVISOR PROGRAMMING GUIDE

        RCSL: 43-GL4351

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in the following way:

Section 4.1 instead of the already existing page 27.

Section 4.2 instead of the pages C1 and C2 in appendix C.

The new appendix: BATCH FLAGS in section 5 can be inser-
ted in the:

        RC3600 DATA ENTRY RELEASE 2

        USER'S GUIDE PART 2

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as a new appendix 12, please correct the index to the manual
with the text: APPENDIX 12 BATCH FLAGS.

1.   The reason for this manual is: 1.

      1. A new version of the supervisorprogram COPY which now is able
         to copy one or more batches to a new batch and produce a
         printout with time, date and a list of copied batches.

      2. The extension of the batch statusword from one word to two
         words.

2. PROGRAM: COPY - create a new batch by copying one ore more existing   2.
                   batches.

   KEYING: 1. Key: COPY
                   2. Key: Name of batch to be copied.
                   3. Key: Name of job to which the batch is to be copied.
                   4. Key: . and
                      key: Name of the new batch.
                   5. Key: CONT if more batches is to be copied.
                   6. Press the ENTER key.

   DESCRIPTION: The COPY program is used to create a new batch by making a
                   copy of one ore more existing batch(es). If the job speci-
                   fied in the command does not exist it will be created. The
                   original batch(es) is left unchanged.
                   If CONT is keyed, then the new command can be typed when the
                   supervisor is in WAITING mode.
                   If CONT is keyed to the last batch, and there is no more
                   batches to copy, key STOP to stop and remove the program.
                   The program may for example be used if it is wanted that the
                   same batch should exist in more than one job, to preserve
                   a single or a few batches when a job is going to be deleted
                   by the DELETE JOB command, or to copy different batches to
                   one batch, by using the parameter CONT.
                   The program produces a printout containing the following
                   information for each copied batch:

                   - JOBNAME   name of output job.
                   - BATCHNAME   name of output batch.
                   - BATCH NO.   the copynumber of input batch.
                   - BATCH NAME   the name of the input batch.
                   - NO.OF RECORD   number of records copied from input batch.

                   After the last batch is copied then the information:
                   TOTAL NO.OF RECORDS: <No of records total in the new batch>
                   will be printed.
                   The following ERROR may occour in the printout:
                   *****DISC ERROR:<code> IN BATCH:<batch1>, LAST BATCH OK IS: <batch2>

                   The batch cannot be copied due to a disc error. <code> is
                   descriped in appendix 2, <batch1> is the name of the cur-
                   rent input batch and <batch2>is the name of the last batch
                   copied without errors.

   EXAMPLES: COPY   A001   BJOB.B0001

                   COPY   A0002   BJOB.B0002   CONT
                   COPY   A0003   BJOB.B0002   CONT
                   COPY   ABAT1   BJOB.B0002

   RECEIPTS: NOT NAME   The specified batchname is not the name of
                                   a discfile.
                   NOT BATCH   The specified batchname is not an existing
                                   batch.
                   NOT JOB   The jobname specifies a discfile which is
                                   not a job.
                   BATCH IN USE   The batch to be copied is used by another
                                   keystation.
                   JOB IN USE   The job which the batch is to be copied from
                                   or to is used by another keystation.
                   LIBRARY IN USE The joblibrary containing the jobnames of the
                                   system is used by another keystation.
                   NAME EXIST   The name specified as new batch name already
                                   exist as a discfile.
                   STATE ERROR   The batch is not in a state to be copied
                                   (must be closed, see section 11 in part 1 of
                                   this Users Guide).
                   DISC ERROR<code> Consult appendix 2.

3.   CORRECTIONS TO BATCH DESCRIPTION.   3.

5. BATCH DESCRIPTION.

5.1 Batch Definition.

A batch is the area on a disc (a disc file), where the processed
data are stored. The batch is the output area for the processed
document.

The keyed data are stored in the batch as records. These records
describe the logical structure of the processed document(s).

A record contains a number of fields. A field is an element in
the document that is processed as a single unit.

5.2 Job Definition.

A job is a collection of batches, which can be referred together
using the jobname. Physically a job is a named file on the disc.
The file contains the names of the batches in the job.

The names of all jobs within the system are collected in the job
library, also a file on the disc.

5.3 Flags and Status.

Each field, record, and batch has certain system flags associated
to it. The flags are used for determinating the status of a field,
a record, and a batch.

5.3.1 Field Flags.

The field flags are named validity flag and skip flag and descri-
bes whether the field is:

*   VALID or INVALID
*   SKIPPED, SKIPPED BY STATEMENT, or NOT SKIPPED.

The field flags and their values are explained in the Data Entry   3.
Format Language Guide.

5.3.2 Record Flags.

The record flags are named <u>validity</u> flag and <u>rekey</u> flag and de-
fines whether the record is:

*   VALID or INVALID
*   REKEYED or NOT REKEYED

The record validity flag is INVALID if at least one field in the
record is invalid, otherwise the validity flag is VALID.

The record rekey flag is REKEYED if the record is rekeyed, other-
wise the rekey flag is not rekeyed.

5.3.3 Batch Flags.

The batch flags are named <u>state</u> flag, <u>rekey</u> flag, <u>edit</u> flag,
<u>dump</u> flag, <u>transfer</u> flag, <u>save</u> flag, <u>validity</u> flag, <u>sort</u> flag,
<u>rekey required</u> flag, <u>valid required</u> flag, <u>copy</u> flag, <u>key rekey
edit not allowed</u> flag and <u>key rekey not allowed</u> flag.

The values of the <u>state flag</u> and the conditions for their attain-
ment are the following:

BLANK	– After the batch has been created, but be-fore any keying is initiated.
CLOSED	– After termination of keying, rekeying or editing.
EDITING	– During editing.
EDITING ESCAPED	– After temporary interruption of editing.
KEYING	– During keying.

KEYING + REKEYING   - During concurrent keying and rekeying.   3.

ESCAPED   - After rekeying has been temporarily in-
                       terrupted, while keying is still taking
                       place.

REKEYING   - During rekeying.

REKEYING ESCAPED   - After temporary interruption of rekeying.

The <u>rekey flag</u> is REKEYED when every record in the batch is re-
keyed, the flag is PARTIAL REKEYED if some but not all of the re-
cords are rekeyed, and the flag is NOT REKEYED if none of the re-
cords are rekeyed. A batch can be PARTIAL REKEYED if it has been
rekeyed, and when additional records have been created in the
batch by a keying performed after the inital rekeying.

The <u>edit flag</u> is EDITED, if the batch has been edited and is not
opened for keying or rekeying later on, otherwise the flag is NOT
EDITED.

The <u>dump flag</u> is DUMPED, if the batch has been dumped in host
computer format, otherwise the flag is NOT DUMPED.

The <u>transfer flag</u> is TRANSFERRED, if the batch has been transfer-
red by transmission to a host computer in remote job entry fa-
shion, otherwise the flag is NOT TRANSFERRED.

The <u>save flag</u> is SAVED, if the batch is saved by the supervisor
program SAVE, otherwise the flag is NOT SAVED.

The <u>validity flag</u> is INVALID, if at least one record in the batch
is flagged as invalid, otherwise the flag is VALID.

The <u>sort flag</u> is SORTED, if the batch has been sorted by the Data
Entry Sort Package, otherwise the flag is NOT SORTED.

The <u>rekey required flag</u> is REQUIRED, if the batch must be flagged
as rekeyed before it may be dumped in host computer format or
transferred to host computer, otherwise the flag is NOT REQUIRED.

The <u>valid required flag</u> is REQUIRED, if the batch must be valid
before it may be dumped in host computer format or transferred to
host computer, otherwise the flag is NOT REQUIRED.

The <u>copy flag</u> is COPIED, if the batch is a copy of another batch
otherwise the batch is NOT COPIED.

The <u>key rekey edit not allowed flag</u> is NOT ALLOWED, if the batch
is a copy of a number of batches with different formats, or if
the batch is a copy of a number of batches with the same format
and 'end format' is met inside the batch, otherwise the flag is
ALLOWED.

The <u>key rekey not allowed flag</u> is NOT ALLOWED, if the batch is a
copy of a number of batches with the same format and 'end format'
is not met inside the batch, otherwise the flag is ALLOWED.

The batch flags determine the batch status, and are checked be-   3.
fore any batch operation. See section 11 about the protection
system.

5.4 Batch and Job Creation.

New data batches and jobs are created by the control command SET. The
SET command has the following syntax:

1. Key: SET

2. Key the jobname (1 to 5 characters).

3. Key the format name (1 to 5 characters).

4. Key the batch name (1 to 5 characters).

5. If the standard batch size is not wanted, then key the

    size (integer between 2 and 761).

6. If the batch must be rekeyed before it may be dumped or

    transferred, then key:

                            REKEY

7. If the batch must be valid before it may be dumped or

    transferred, then key:

                            VALID

8. Press the ENTER key.

Examples: SET JOB01 FORM BAT01 50
           SET JOB02 F199 BAT02 REKEY VALID

The SET command performs:

*   Creates a data batch with the specified name and with either

    the specified size or the standard size.

*   Creates a job, if the job name does not already exist with-

    in the system, with the specified name and inserts the job

    into the job library.

*   Checks whether or not the specified format name exists with-

    in the system.

3.   *   Initializes the batch status to:

State flag   = BLANK

Rekey flag   = NOT REKEYED

Edit flag   = NOT EDITED

Dump flag   = NOT DUMPED

Transfer flag   = NOT TRANSFERRED

Save flag   = NOT SAVED

Validity flag   = VALID

Sort flag   = NOT SORTED

Rekey required flag   = REQUIRED if the REKEY parameter is
                          specified else NOT REQUIRED

Valid required flag   = REQUIRED if the VALID paramerer is
                          specified else NOT REQUIRED

Copy flag   = NOT COPIED

Key rekey edit mode

not allowed flag   = ALLOWED

Key rekey not

allowed flag   = ALLOWED

The format name specifies the format which controls all keying, re-
keying and editing to this batch.

The size of the batch refers to the number of disc sectors (1 sec-
tor = 1 block = 512 characters) which are reserved for the batch.
If the batch size is not specified the batch is created with the
standard size. The standard size represents the smallest area which
can be reserved on the disc. It must be observed that a batch is
extended automatically when needed as long as disc space is avail-
able.

When specifying the REKEY parameter, the batch is flagged so it
must be rekeyed before it can be dumped or transferred.

When specifying the VALID parameter, the batch must be valid be-
fore it can be dumped or transferred.

5.5 Batch and Job Deletion.

When a batch or a job is not needed any longer within the system,
it may be deleted by the supervisor program DELETE. See Users
Guide Part 2.

4.   CORRECTIONS TO SUPERVISOR PROGRAMMING GUIDE.   4.

4.1.   Corrections to Creation of a Batch.   4.1.

5.4 Creation of a batch.

If a batch is created by a supervisor program there are different
things to remember:
(The structure of a batch, see appendix C)

a) in the batch head:
- jobname must be a name of a job file. If the job does not
  exist already, the job name must be inserted in the job li-
  brary (JBLIB) and a file with the job name must be created
  and the contents must be set according to the specifications
  given in appendix B.
- the format name must be a name of an existing translated
  format if the batch later on must be rekeyed or edited.
- the batch name must be the same name as the name of the file
  where the batch is placed.
- the batch Status1 must be set to closed, i.e. bit 0 = 1
  (status = 100000_8) or closed and invalid, i.e. bit 0 = 1 and
  bit 12 = 1 (status = 100010_8). If the invalid bit (bit 12)
  is set, some of the field in the batch may be invalid.
- the batch Status2 must be set to zero.
- the number of blocks (word 14) and number of records (word
  15) must be calculated and inserted in the batch head.
- end format (word 26) must be set to 100000_8 as if the 'end'-
  statement in the format was executed.
- the other words in the batch head must be set to zero.

b) in the data record head:
- subname must be the name of a subformat in the format spe-
  cified in the batch head.
- the length of the record and the record number in the batch
  must be calculated and inserted.
- the other bytes must be set to zero. The record status can be
  set to non-zero, if the record must not be dumped. (Normally
  the supervisor program 'dump' will skip records with invalid
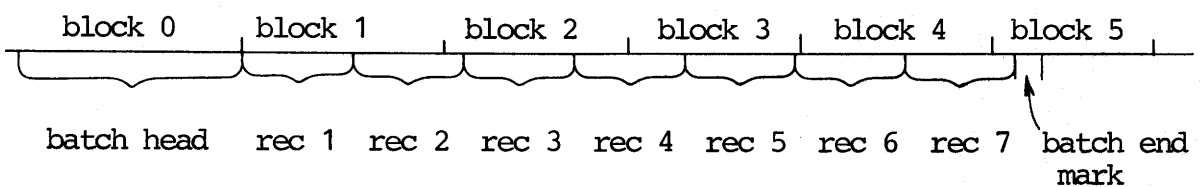 status).

4.2.   Corrections to Structure of a Batch.   4.2.

Appendix C: Structure of a Batch.

A batch is a disc-file containing the records with the fields. The
records are stored from the second block and forward in the file.
The first block contains some information about the batch and is
called the batch head. The batch is terminated by a batch end mark.

Example:

| block 0 | block 1 | block 2 | block 3 | block 4 | block 5 |

batch head   rec 1 rec 2 rec 3 rec 4 rec 5 rec 6 rec 7 batch end
                                                               mark

C.1. Batch Head.

The contents of the batch head is:

word	0 - 2:	Job name: the name of the job, to which the batch belongs.
word	3 - 5:	Format name: the name of the translated format to be used when keying, rekeying and editing the batch.
word	6 - 8:	Batch name.
word	9:	Batch status1 (see below).
word	10:	Byte count in old batch last block.
word	11:	Byte count in work batch last block.
word	12:	Block address of last register record.
word	13:	Byte address of last register record.
word	14:	Number of blocks in the batch inclusive the batch head.
word	15:	Number of data records in the batch.
word	16:	Number of rekeyed records.
word	17:	Number of invalid records.
word	18:	Activation time, real time clock 1.
word	19:	Activation time, real time clock 2.
word	20:	Block count in old batch.
word	21:	Block count in work batch.
word	22:	Name of current subformat.
word	23:	Current recordnumber in old batch.

word   24:   Current record number in work batch.   4.2.

word   25:   Maximum number of records in work batch.

word   26:   End format: = 100000_8 indicates that the
              'end'-statement in the format is executed.

word   27:   Batch status2 (see below).

The rest of the batch head is not in use yet, i.e. must all be
zeroes.

The batch status words is 32 bit, where the value of the bits,
gives a status:

Batch status1:

all bits = 0 : the batch is empty.

bit   0 = 1 : the batch is closed.

bit   1 = 1 : the work batch is closed.

bit   2 = 1 : the batch is editing.

bit   3 = 1 : the batch is rekeying.

bit   4 = 1 : the batch is keying.

bit   5 = 1 : the batch must be rekeyed (the parameter 'rekey'
                 has been used in the 'set'-command).

bit   6 = 1 : the batch has been rekeyed.

bit   7 = 1 : the batch has been partial rekeyed.

bit   8 = 1 : the batch has been edited.

bit   9 = 1 : the batch has been saved by the supervisor program
                 'save'.

bit   10 = 1 : the batch has been dumped by the supervisor pro-
                 gram 'dump'.

bit   11 = 1 : the batch has been transferred.

bit   12 = 0 : the batch is valid.

bit   12 = 1 : the batch is invalid, i.e. one or more fields are
                 invalid.

bit   13 = 1 : the batch has been sorted.

bit   14 = 1 : the batch must be valid (the parameter 'valid' has
                 been used in the 'set'-command).

bit   15   : Not used at present.

<u>Batch status:</u>   4.2.

bit   16 = 1 : the batch is a copy of another batch.
bit   17 = 1 : it's not allowed to key, rekey or edit in this
                 batch.
bit   18 = 1 : it's not allowed to key or rekey in this batch.
bit 19 to 31   : not used at present.

5.   NEW APPENDIX.   5.

Appendix 12, Batch Flags.

The batch flags are all stored in the Batch statusword 1 and 2.

One statusword is 16 bit and the bits in these two statuswords
are numbered form bit 0 to bit 31.

Statusword 1 = Bit 0 to bit 15.
Statusword 2 = Bit 16 to bit 31.

BIT	MEANING
All bits = 0	The batch is empty.
0 = 1	The batch is closed.
1 = 1	The work batch is closed.
2 = 1	The batch is editing.
3 = 1	The batch is rekeying.
4 = 1	The batch is keying.
5 = 1	The batch must be rekeyed. (The parameter 'rekey' has been used in the 'set'-command.
6 = 1	The batch has been rekeyed.
7 = 1	The batch has been partiel rekeyed.
8 = 1	The batch has been edited.
9 = 1	The batch has been saved by the supervisor program 'SAVE'.
10 = 1	The batch has been dumped by the supervisor program 'DUMP'.
11 = 1	The batch has been transferred.
12 = 0	The batch is valid.
12 = 1	The batch is invalid i.e. one or more fields are invalid.
13 = 1	The batch has been sorted.
14 = 1	The batch must be valid the parameter 'valid' has been used in the 'set'-command.

15	Not used at present.	5.
16 = 1	The batch is a copy of another batch.	
17 = 1	It's not allowed to key, rekey or edit in the batch.	
18 = 1	It's not allowed to key or rekey in the batch, the batch must first be edited.	
19 - 31	Not used at present.	