
Title: RC3600 System Generation with DOMUS GEN User's Guide

 A REGNECENTRALEN

RC SYSTEM LIBRARY: FALKONERALLE 1 DK-2000 COPENHAGEN F

RCSL No: 43-GL5199
Edition: October 1977
Author: T. G. Rasmussen

Keywords: DOMUS, Systemgeneration, Guide

Abstract: This manual describes how to generate program magnetic tapes, flexible discs, paper tapes and card decks with the DOMUS utility system GEN.

CONTENTS

PAGE

1.	INTRODUCTION	1
2.	REQUIREMENTS	2
2.1	Core	2
2.2	Basic Software	2
2.3	Disc Files	2
3.	CALL	3
4.	CONTROL FILE	4
4.1	Head	4
4.2	Autoload	4
4.3	Command	5
4.4	Program	5
4.5	Note	6
4.6	Basis	7
4.7	Block	7
4.8	End	7
4.9	General Syntax	8
5.	SYSTEM MESSAGES	9
5.1	Program Messages	9
5.2	Disc Messages	10
5.3	Device Messages	10
5.4	System Messages	11
Appendix A	- EXAMPLE OF CONTROL FILE	A - 1
-	B - EXAMPLE OF LOG	B - 1
-	C - VALID FOR PUNCHING CARDS ONLY	C - 1

1. The first part of the document discusses the importance of maintaining accurate records.

2. It is essential to ensure that all data is entered correctly and consistently.

3. Regular audits should be conducted to verify the integrity of the information.

4. Proper labeling and organization of files are crucial for easy retrieval.

5. Security measures must be implemented to protect sensitive data from unauthorized access.

6. Backup procedures should be established to prevent data loss in the event of a disaster.

7. Training for staff is necessary to ensure they understand the correct procedures.

8. Clear communication channels should be maintained for reporting any issues.

9. The document concludes by emphasizing the ongoing nature of data management.

10. It is the responsibility of all users to adhere to these guidelines.

11. Thank you for your attention and cooperation.

12. Sincerely,
[Signature]

13. [Name]
[Title]

14. [Address]
[City, State, Zip]

15. [Phone Number]

16. [Email Address]

17. [Fax Number]

18. [Website]

19. [Social Media Links]

20. [Additional Information]

21. [Footer]

1. INTRODUCTION

1.

System GEN is used to generate program magnetic tapes, DOMUS magnetic tapes, card decks, program flexible discs and program paper tapes.

GEN is running as a DOMUS utility.

GEN consists of 5 program modules:

One input and control module and four device dependent output modules. Those five programs must be installed on the DOMUS disc in the files:

			<u>Process name</u>
GEN:	RC36-00663	input and control module	GEN
GENOM:	RC36-00664	output module magnetic tape	} GENO
GENOF:	RC36-00665	output module flexible disc	
GENOP:	RC36-00666	output module paper tape	
GENOR:	RC36-00667	output module punched cards	

The following information is for your information only. It is not intended to be used as a substitute for professional advice. Please consult your attorney for more information.

Important Information Regarding Your Account

We are pleased to have you as a customer. We want to ensure that you are fully informed of the terms and conditions of our services. Please read the following information carefully.

Our services are provided on a non-exclusive basis. We reserve the right to modify or discontinue our services at any time without notice. We are not responsible for any loss of data or information that may occur while using our services.

2. REQUIREMENTS

2

2.1 Core

2.1

GEN and one of the output modules require approx. 12 KB memory. If output on magnetic tape, memory must be available to get a core item as big as the biggest abs.bin module (autoload and basis) to be put on the tape.

2.2 Drivers

2.2

For all output devices except flexible discs, the latest version (at present: MT006, PP002, RP001) must be used. For flexible discs FD200 must be used.

If a LOG is produced, the relevant driver for the LOG device as well as the program TIME must be loaded to get the creation date.

2.3 Disc Files

2.3

A work file (GENL) is created in which the LOG is written. When it has been written on the LOG device or another disc file, GENL is removed before program termination.

1. The first part of the document discusses the importance of maintaining accurate records of all transactions and activities. It emphasizes the need for transparency and accountability in financial reporting.

2. The second part of the document outlines the various methods and techniques used to collect and analyze data. It highlights the importance of using reliable sources and ensuring the accuracy of the information gathered.

3. The third part of the document focuses on the interpretation and analysis of the collected data. It discusses the various statistical tools and techniques used to identify trends and patterns in the data.

4. The fourth part of the document provides a detailed overview of the findings and conclusions drawn from the analysis. It discusses the implications of the results and offers recommendations for future research and action.

3. CALL

3.

GEN OUT.<device> OCOPY.<number> CONTR.<file>
LOG.<devicedescriptor> LCOPY.<number> MARG.<number>

- OUT: The output device:
 MT ~ magnetic tape
 FD ~ flexible disc
 PTP ~ paper tape punch
 RDP ~ card reader punch
 (Default is MT)
- OCOPY: Number of copies of the output.
 (If 2 identical program tapes should be generated, the control file will be syntax checked twice, if the program is called twice. This is avoided by using this parameter).
 (Default is 1)
- CONTR: The control file:
 A disc file generated by the text editor containing the commands to GEN.
 Syntax for this file, see section 4.
 (No default - must be specified)
- LOG: A file descriptor describing the device where the LOG should be written. If the name does not exist, a disc file is created, and the LOG is written in a format that can be printed with the text editor or the DOMUS utility PRINT.
 (Default no LOG)
- LCOPY: Number of copies of the LOG. Only relevant if not logging in disc file.
 (Default is 1)
- MARG: Margin on the LOG (number of spaces max. 10 to be printed before each line).
 (Default is 0)

The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that every entry should be supported by a valid receipt or invoice. This ensures transparency and allows for easy verification of the data.

Furthermore, it is noted that the records should be kept in a secure and accessible format. Regular backups are recommended to prevent data loss in the event of a system failure or disaster.

In addition, the document highlights the need for consistent data entry. Standardized formats and codes should be used throughout the system to avoid confusion and errors. This consistency is crucial for the integrity of the information being collected.

Finally, it is stressed that all users should be trained on the correct procedures for data entry and record management. This training should cover not only the technical aspects but also the importance of data accuracy and security.

The second section of the document focuses on the process of data analysis. It describes how the collected data should be reviewed and interpreted. This involves identifying trends, patterns, and anomalies within the dataset.

It is suggested that various analytical tools and software should be utilized to facilitate this process. These tools can help in visualizing the data and generating reports that provide meaningful insights into the organization's performance.

Moreover, the document discusses the importance of data security. Sensitive information should be protected through encryption and access controls. Only authorized personnel should be allowed to view or modify the data.

Regular security audits and updates to the system are also recommended to ensure that the data remains safe from potential threats.

The final part of the document provides a summary of the key points discussed. It reiterates the importance of accurate record-keeping, consistent data entry, and secure data management.

It concludes by stating that these practices are essential for the success of any data-driven organization. By following these guidelines, the organization can ensure that its data is reliable, secure, and easy to analyze.

4. CONTROL FILE

4.

The control file is a disc file written with the text editor. The file contains all information needed for system generation.

Before any output is made, a complete syntax check of the control file and a lookup on all disc files is performed. The syntax is as follows (Appendix A shows a complete example):

4.1 Head Function

4.1

This function is used to write the head of the LOG. The syntax is:

/HEAD	initials
IDEN(T)	P: xxx-xxx
CUST(OMER)	customer name
ADDR(ESS)	city and country of customer
DENS(ITY)	nnnn BPI (only magnetic tape)
PREV(IOUS)	P: xxx-xxx

4.2 Autoload Function

4.2

This function is used to write an autoload file on the output device. The syntax is:

```
/AUTO(LOAD) <loadfile> <comment>
```

<loadfile>	is the name of the disc file in which the basic system is in abs.bin format.
<comment>	is a text string written on the log as comment, e.g. BTM08: RCSL: 43-GL3160. From the <comment> max. 47 characters is used. TAB (CNTRL I) is interpreted as one space.

... ..
... ..
... ..

... ..
... ..
... ..
... ..
... ..
... ..
... ..
... ..

... ..
... ..
... ..
... ..
... ..
... ..
... ..
... ..
... ..
... ..

4.3 Command function

4.3

This function is used to write a command file on the output device.

The syntax is:

```
/COMM(AND) <ident>
```

```
command 1
```

```
command 2
```

```
.
```

```
.
```

```
.
```

```
command n
```

```
end
```

<ident> is the file ident on the output device (ordinarily not used on paper tape and punched cards).

In each command a maximum of 511 characters is allowed. Only when generating DOMUS tapes it may be more than 80 characters (not checked by GEN).

If a LOG is produced, and a command line is too long for 1 line, the command is divided into more lines on the LOG to avoid any loss of documentation.

The command end must be the last in the command file, and it must be placed on a separate line, because GEN uses end as terminator for the command function.

4.4 Program Function

This function is used to write a program file on the output device.

The syntax is:

```
/PROG(RAM)
```

```
<loadfile> <ident> <comment>
```

```
<loadfile> <ident> <comment>
```

1950

Dear Mr. [Name]

I have received your letter of the [Date] regarding [Subject].

The information you provided is being reviewed.

I will contact you again once a decision has been reached.

Thank you for your patience.

Sincerely,
[Name]

[Address]

[City, State, Zip]

[Phone Number]

[Additional Information]

[Closing Remarks]

[Signature]

<loadfile> is the name of the disc file in which the program is in rel. binary format
 <ident> is the file ident on the output device
 <comment> is a text string written on the LOG, e.g. PR006 RCSL: 43-GL2400.
 From the comment max. 47 characters are used.
 TAB (CNTRL I) is interpreted as one space.

If no <ident> is wanted on the output device, but a <comment> should be written on the LOG, put a <-> instead of <ident>.

This function can be used to copy anything from the disc, because no check of the data is performed (e.g. to copy a code procedure library to a program tape).

The program function is not terminated until the next /FUNCTION is read.

4.5 Note Function

4.5

This function is used to put comments on the LOG.

The syntax is:

```

/NOTE
line 1
line 2
.
.
.
.
.
line n
  
```

The function is not terminated until the next /FUNCTION is read. Also empty lines and formfeeds are copied to the LOG, so when using this function it is possible to divide the LOG into logically parts and pages.

... being well ... with the ...
... of the ...
... the ...
... the ...

The ...

... of the ...

... the ...
... the ...

... the ...
... the ...

... the ...
... the ...

12

...

... the ...

...

...

...

...

... the ...
... the ...
... the ...

...

4.6 Basis Function

4.6

This function is only relevant, when the output device is magnetic tape. If not, it will be the same as the program function.

The basis function is used to make a core image from an abs.binary file like the autoload function, but the autoload function writes the core image in one big block on the magnetic tape. The basis function divides the core image into blocks of the current used block-size (see block function).

The syntax is:

```
/BAS1(S)
<loadfile> <ident> <comment>
```

(Description of the parameters, see program function).

4.7 Block Function

4.7

This function is only relevant when output device is magnetic tape. If not, it will be ignored.

Block function is used to change the block size (default is 80 bytes).

The syntax is:

```
/BLOC(K)      <size>
<size>        is the new block size (1 - 512 bytes)
```

4.8 End Function

4.8

This function is used to terminate the GEN program.

The syntax is:

```
/END
```

The first part of the document discusses the importance of maintaining accurate records. It emphasizes that proper record-keeping is essential for ensuring the integrity and reliability of the data collected. This section also outlines the various methods used to collect and analyze the data, highlighting the challenges faced during the process.

In the second part, the focus shifts to the results of the study. The data shows a clear trend towards increased efficiency in the process being studied. This is supported by the statistical analysis conducted, which indicates a significant improvement in the key performance indicators.

The third part of the document provides a detailed analysis of the findings. It discusses the implications of the results and offers recommendations for future research. The author suggests that further studies should be conducted to explore the long-term effects of the implemented changes.

Finally, the document concludes with a summary of the key points. It reiterates the importance of the findings and the need for continued research in this area. The author expresses confidence in the results and hopes that the information provided will be helpful to others in the field.

4.9 General Syntax

4.9

Each line in the control file must be terminated by a carriage return. As separator between <loadfile>, <ident> and <comment> all characters less than or equal to space (decimal value = 32) are legal (i.e. LF, CR, space). If <loadfile> is more than 5 characters, the first 5 are used, and the rest is skipped.

For <ident> the first 5 characters are transferred to the output device, the first 11 to the LOG, and the rest is skipped.

The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that proper record-keeping is essential for the company's financial health and for providing reliable information to stakeholders. The text also mentions the need for regular audits and reviews to ensure the integrity of the data.

In addition, the document highlights the role of technology in streamlining record-keeping processes. It suggests that implementing a robust accounting system can significantly reduce the risk of errors and improve the efficiency of financial reporting.



5. SYSTEM MESSAGES

5

If an error occurs on the disc, a message is written on the console and the program execution is terminated.

If an error occurs on the output device, a message is written on the console and the output operation is repeated each second. To stop the execution, type 'STOP'.

If an error occurs while writing the LOG to a device different from disc, a message is written on the console, and the operation is repeated each second. To stop the execution, type 'STOP'.

When execution is terminated the disc file (GENL) is removed, and the programs GEN, GENO and all area processes used by GEN are removed from memory.

The system messages are divided into 4 groups:

1. Program messages
2. Messages concerning the disc and the catalog
3. Messages concerning the devices
4. System messages

5.1 Program messages

5.1

Following messages will cause stop of the execution:

ILLEGAL OUT DEVICE

Syntax error in the call

NO CONTROL FILE

Syntax error in the call

The first part of the document discusses the importance of maintaining accurate records.

This section describes the various methods used to collect and analyze data.

The results of the study are presented in the following table.

The data shows a significant increase in the number of participants over time.

These findings suggest that the intervention has a positive impact on the study.

The study was conducted over a period of six months.

The results are consistent with previous research in this area.

The study was funded by the National Institutes of Health.

The authors would like to thank the participants for their contribution.

SYNTAX ERROR IN <file>

The disc file <file>, which is specified to be control file, contains something that does not correspond to the description in section 4.

SUM ERROR**NOT ENOUGH CORE**

Appears when loading an abs.binary module (only when output is magnetic tape and function is /AUTO or /BASIS).

EXECUTION STOPPED BY OPERATOR

Appears after device message and operator reply 'STOP'.

ILLEGAL MESSAGE TO OUTPUT MODULE

Should not appear (Software malfunction).

GEN READY**LOAD OUTPUT DEVICE TO GET COPY**

The OCOPY parameter has been set greater than 1, a generation is ended and GEN is ready for the next.

To continue, make the output device ready and press return.

To stop and get the LOG (if specified), type 'STOP'.

5.2 Disc messages

5.2

All disc messages will cause stop of the execution. The messages are fetched from the DOMUS error text file (SSYSE) and are described in DOMUS User's Guide.

5.3 Device messages

5.3

Device messages are from the log device or the output device. To continue, make the device ready (the output operation is automatically repeated each second). To stop execution, type 'STOP'.

The messages appear in the following format:

```
<device> STATUS
<error text>
```

Dear Mr. [Name],
I am writing to you regarding the [Topic].
I have reviewed the [Document] and [Action].

The [Information] provided is [Status].
I am [Action] the [Process].
I will [Action] the [Process] by [Date].

I am [Action] the [Process].
I will [Action] the [Process] by [Date].

I am [Action] the [Process].
I will [Action] the [Process] by [Date].
I am [Action] the [Process].
I will [Action] the [Process] by [Date].

I am [Action] the [Process].
I will [Action] the [Process] by [Date].
I am [Action] the [Process].
I will [Action] the [Process] by [Date].

I am [Action] the [Process].
I will [Action] the [Process] by [Date].
I am [Action] the [Process].
I will [Action] the [Process] by [Date].

I am [Action] the [Process].
I will [Action] the [Process] by [Date].

I am [Action] the [Process].
I will [Action] the [Process] by [Date].

<device> indicates the device, and <error text> explains what is wrong.

5.4 System messages

System messages cause stop of the execution. System messages may appear when GEN asks S to GET or FREE core items or to LOAD or KILL processes. The messages are fetched from the DOMUS error text file (SSYSE) and are described in DOMUS User's Guide.

1. The first part of the document is a list of names and addresses.

2. The second part of the document is a list of names and addresses.

Appendix A

This is an example of a control file:

```
/HEAD    TGR
IDEN     P: 600-007
CUST     RC-TUG
ADDR     GLOSTRUP, COPENHAGEN
PREV     P: 600-006
DENS     1600 BPI

/AUTO    BTM09      BTM09      RCSL: 43-GL4326

/COMM    DRIVERS
CLEAR
LOAD PTR LPT PTP CLTAB
END

/COMM    EDITOR
CLEAR
LOAD PTR LPT PTP CLTAB P16
END

/NOTE
Here any comments that is wanted on the log could be written.
Anything from here to the next "slash" is interpreted as comment.

/PROG
PR006    PTR      PR006      RCSL: 43-GL2400
LP010    LPT      LP010      RCSL: 43-GL3762
PP002    PTP      PP002      RCSL: 43-GL3272
CLTAB    CLTAB    RC36-00222  RCSL: 43-GL2949
EDIT     P16      RC36-00016  RCSL: 43-GL1661

/END
```

united states of america

Washington, D.C.

Appendix B

This is an example of a LOG (generated by the control file in Appendix A):

```
RC3600 MUS PROGRAM TAPE : P: 600-007
DENSITY                   : 1600 BPI
CUSTOMERNAME              : RC-TUG
COUNTRY, TOWN             : GLOSTRUP, COPENHAGEN
CREATING DATE             : 77.10.10
CREATED BY                : TGR
REPLACING                 : P: 600-006
```

```
FILE 001 AUTOLOAD      BTM09      RCSL: 43-GL4326
```

```
FILE 002* DRIVERS      CLEAR
                       LOAD PTR LPT PTP CLTAB
                       END
```

```
FILE 003* EDITOR      CLEAR
                       LOAD PTR LPT PTP CLTAB P16
                       END
```

Here any comments that is wanted on the log could be written.
Anything from here to the next "slash" is interpreted as comment.

```
FILE 004 PTR           PR006      RCSL: 43-GL2400
FILE 005 LPT           LP010      RCSL: 43-GL3762
FILE 006 PTP           PP002      RCSL: 43-GL3272
FILE 007 CLTAB         RC36-00222  RCSL: 43-GL2949
FILE 008 P16           RC36-00016  RCSL: 43-GL1661
```

10-11-1964

Dear Mr. [Name]

I have received your letter of the 10th and am sorry that I cannot give you a more definite answer at this time. The matter is being reviewed and I will contact you again as soon as a final decision has been reached.

I am sure that you will understand the need for thoroughness in this process. We are committed to providing the highest quality of service and ensuring that all decisions are based on the most complete information available.

Thank you for your patience and understanding. I will be sure to keep you informed of any developments.

Sincerely,
[Name]

Enclosed for you are two copies of the report mentioned in my letter of the 10th. I hope this information is helpful to you. Please let me know if you have any questions or need further clarification.

Appendix CValid for Punching Cards only

When punching cards (each card is one module) are numbered in succession starting with 1, the number is printed in column 68 - 72.

When function is /AUTO or /PROG the <comment> is also printed on each card in the module from column 1.

When function is /COMM each command is printed on the card over the punch of the command.

1942

1. The first part of the report is devoted to a description of the work done during the year. It is divided into two main sections: a general survey of the work and a detailed account of the results of the various experiments.

2. The general survey shows that the work has been carried out in accordance with the programme of work approved by the Committee. It also shows that the work has been carried out in a most efficient manner and that the results obtained are of a high standard.

3. The detailed account of the results of the various experiments is given in the following sections:

(a) The first section deals with the results of the experiments on the effect of temperature on the rate of reaction. It is shown that the rate of reaction increases with increasing temperature and that the increase is in accordance with the Arrhenius equation.

(b) The second section deals with the results of the experiments on the effect of concentration on the rate of reaction. It is shown that the rate of reaction increases with increasing concentration and that the increase is in accordance with the law of mass action.

(c) The third section deals with the results of the experiments on the effect of catalyst on the rate of reaction. It is shown that the rate of reaction is increased by the presence of a catalyst and that the increase is in accordance with the theory of catalysis.

(d) The fourth section deals with the results of the experiments on the effect of solvent on the rate of reaction. It is shown that the rate of reaction is affected by the nature of the solvent and that the increase is in accordance with the theory of solvation.

(e) The fifth section deals with the results of the experiments on the effect of pressure on the rate of reaction. It is shown that the rate of reaction is affected by the pressure and that the increase is in accordance with the theory of collision theory.

(f) The sixth section deals with the results of the experiments on the effect of light on the rate of reaction. It is shown that the rate of reaction is affected by the intensity of the light and that the increase is in accordance with the theory of photochemistry.

(g) The seventh section deals with the results of the experiments on the effect of time on the rate of reaction. It is shown that the rate of reaction is affected by the time and that the increase is in accordance with the theory of reaction kinetics.

(h) The eighth section deals with the results of the experiments on the effect of pH on the rate of reaction. It is shown that the rate of reaction is affected by the pH and that the increase is in accordance with the theory of acid-base catalysis.

(i) The ninth section deals with the results of the experiments on the effect of ionic strength on the rate of reaction. It is shown that the rate of reaction is affected by the ionic strength and that the increase is in accordance with the theory of ionic catalysis.

(j) The tenth section deals with the results of the experiments on the effect of dielectric constant on the rate of reaction. It is shown that the rate of reaction is affected by the dielectric constant and that the increase is in accordance with the theory of dielectric catalysis.

