A PRIMITIVE REPORT GENERATOR

IMPLEMENTED IN ZILOG SYSTEM COMMANDS

by

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A report generator, implemented as a series of Zilog Development System commands, is reported. It is, of course, generated by the system it reports. Its salient feature is the automatic inclusion of otherwise independent material through access to the file system during report generation.

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Information Sciences
University of California
at
Santa Cruz

June 1, 1978

ABSTRACT

A report generator, implemented as a series of Zilog
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generated by the system it reports. Its salient feature is
the automatic inclusion of otherwise independent material
through access to the file system during report generation.

SECTION 1. Introduction.

Generating a technical report involves both the preparation of descriptive text as well as the inclusion of other material such as tables and programs that have an independent existence of their own. It is helpful if the generation of the report can automatically include the latest version of such extra materials rather than having them incorporated into the prepared text at some earlier time. It is for such a purpose that the system described here is designed.

The context of this system is the Zilog Development System which includes a command language for file manipulation as well as editors and similar aids for report generation. Information about these systems can be obtained from the appropriate manuals as noted in the bibliography[1,2].

A file in the Zilog system can be either a text file or a command file depending upon the way it is addressed. A command of the form:

DO XXX;

accesses the file named XXX and obeys the commands in it. A DO command can have parameters which follow the name of the file; within the command file the parameters are designated by the symbols #1, #2, etc. Finally a command of the form:

COPY XXX $CON;

accesses the file named XXX and causes it to be displayed on the user's console. With this brief introduction the reader should be able to understand the details now to be reported.

This report was in fact generated by the report generator as will become apparent. There are two output devices addressed by the program: $CON and $DIABLO. The former is the CRT console; the latter is a Diablo printer. It is upon the latter that this report is printed.

SECTION 2. A Report Generating Report Generated.

Below are presented a series of command files that are activated by the DO command. For ease of identification each such file contains an initial COMMENT which gives the name of the file. There are four files for which the information cannot be easily displayed. They are:

NULL   This is a file that contains nothing and therefore has no effect if printed out.

COMMENT This file is absolutely empty also. It is used only as a command file and has no effect when executed. NULL could equally well have been used except that the mnemonic name COMMENT was desired. One may later wish to consider the reason that COMMENT does not contain a comment itself. Upon reflection one will realize that while COMMENT does nothing, it could do it forever if it contained a comment.

DOUBLESPACE This file contains two blank lines.

FORMFEED This file contains the single character for formfeed, i.e., control L or Hex C0.

There are in addition some files named P.m.n where m and n are small integers. They correspond to pages or parts of pages of textual information.

To get a copy of this report on a system which has all the relevant files, type

            DO REPORT;

and stand back.

The commands that are triggered off, starting with REPORT itself, are:

DO COMMENT This is file REPORT;
DO COMMENT First suppress extraneous output;
B;
DO COMMENT Form feed to get clean sheet;
DO PAGE NULL;
DO PAGE TITLE;
DO PAGE ABSTRACT;
DO SECTION1;
DO SECTION2;
DO PAGE BIB;

DO COMMENT This is file PRINT;
COPY #1 $DIABLO;

DO COMMENT This is file PAGE;
DO PRINT #1;
DO PRINT FORMFEED;

```
DO COMMENT  This is file SECTION1;
DO PAGE P.1.1;


DO COMMENT  This is file SECTION2;
DO PRINT P.2.1;
DO PRINT DOUBLESPACE;
DO PRINT REPORT;
DO PRINT DOUBLESPACE;
DO PRINT PRINT;
DO PRINT DOUBLESPACE;
DO PAGE PAGE;

DO PRINT P.2.2;
DO PRINT SECTION1;
DO PRINT DOUBLESPACE;
DO PRINT SECTION2;
DO PRINT DOUBLESPACE;
DO PAGE P.2.3;
```

There is little more to say. The editor can be used to change $DIABLO to $CON in PRINT to allow the user to interact with his report on the CRT. The reverse change will direct the output to the hardcopy device when desired. Note that it is therefore difficult to get a copy of this report with $CON in file PRINT.

4.

Bibliography.

1. (anon.) RIO Operating System User's Manual, Zilog Inc., 10460 Bubb Rd., Mountain View, CA 95015 (April 1978).

2. (anon.) RIO Text Editor User's Manual, Zilog Inc., 10460 Bubb Rd., Mountain View, CA 95015 (January 1978).

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