SysLog

COLLABORATORS			

	TITLE : SysLog		
ACTION	*NAME*	*DATE*	*SIGNATURE*
WRITTEN BY		February 6, 2023	

REVISION HISTORY			

NUMBER	DATE	DESCRIPTION	NAME

Contents

Chapter 1

SysLog

1.1 SysLog.guide

```
                            SysLog - Amiga system log daemon

         written by Peter Simons <simons@peti.GUN.de>



         Legal Stuff
                             Copyright and standard disclaimer

         Overview
                               What is SysLog?

         SysLog usage
                          Invoking SysLog

         For programmers
                       How to add SysLog-info to your own programs

         How to contact me
                    Guess what! :-)
```

1.2 SysLog.guide/Legal Stuff

```
Copyright:
==========

    This software package is copyrighted in 1993 by Peter Simons,
Germany and has been released under the concept of freeware.  You're
encouraged to spread the archive as far as possible and to support
SysLog in your own programs, even if they're commercial.

"Standard Disclaimer":
======================
```

This product is meant for educational purposes only. Any resemblance
to real persons, living or dead is purely coincidental. Void where
prohibited. Some assembly required. List each check separately by bank
number. Batteries not included. Contents may settle during shipment.
Use only as directed. No other warranty expressed or implied. Do not
use while operating a motor vehicle or heavy equipment. Postage will be
paid by addressee. Subject to CAB approval. This is not an offer to
sell securities. Apply only to affected area. May be too intense for
some viewers. Do not stamp. Use other side for additional listings.
For recreational use only. Do not disturb. All models over 18 years of
age. If condition persists, consult your physician. No user-serviceable
parts inside. Freshest if eaten before date on carton. Subject to
change without notice. Times approximate. Simulated picture. No postage
necessary if mailed in the United States. Breaking seal constitutes
acceptance of agreement. For off-road use only. As seen on TV. One size
fits all. Many suitcases look alike. Contains a substantial amount of
non-tobacco ingredients. Colors may, in time, fade. We have sent the
forms which seem to be right for you. Slippery when wet. For office use
only. Not affiliated with the American Red Cross. Drop in any mailbox.
Edited for television. Keep cool; process promptly. Post office will
not deliver without postage. List was current at time of printing.
Return to sender, no forwarding order on file, unable to forward. Not
responsible for direct, indirect, incidental or consequential damages
resulting from any defect, error or failure to perform. At
participating locations only. Not the Beatles. Penalty for private use.
See label for sequence. Substantial penalty for early withdrawal. Do
not write below this line. Falling rock. Lost ticket pays maximum rate.
Your cancelled check is your receipt. Add toner. Place stamp here.
Avoid contact with skin. Sanitized for your protection. Be sure each
item is properly endorsed. Sign here without admitting guilt. Slightly
higher west of the Mississippi. Employees and their families are not
eligible. Beware of dog. Contestants have been briefed on some
questions before the show. Limited time offer, call now to insure
prompt delivery. You must be present to win. No passes accepted for
this engagement. No purchase necessary. Processed at location stamped
in code at top of carton. Shading within a garment may occur. Use only
in well-ventilated area. Keep away from fire or flame. Replace with
same type. Approved for veterans. Booths for two or more. Check here if
tax deductible. Some equipment shown is optional. Price does not
include taxes. No Canadian coins. Not recommended for children.
Prerecorded for this time zone. Reproduction strictly prohibited. No
solicitors. No alcohol, dogs, or horses. No anchovies unless otherwise
specified. Restaurant package, not for resale. List at least two
alternate dates. First pull up, then pull down. Call toll free before
digging. Driver does not carry cash. Some of the trademarks mentioned
in this product appear for identification purposes only. Record
additional transactions on back of previous stub. Decision of judges is
final.

   This supersedes all previous notices.

1.3 SysLog.guide/Overview

```
What is SysLog?
===============
```

SysLog is a set of subroutines designed to help you to debug your programs. Several concepts for debugging output exist (one of them is the debug.lib, released by Commodore) and all of them have a few advantages and disadvantages.

I used a lot of them including self-written routines, but nothing was really satisfying at all. Then I found the SysLog package on the AmiNet which was appearently quite old and undocumented. However, I think this concept is the best and that's why I decided to take the project over.

SysLog consists of two parts: A link library, containing the routines your programm should call, and a daemon, handling the debugging output. If your program jumps into the log-routine, an exec message is sent to the daemon's port and control is handed back to the program immediatly. The daemon will receive the message and will print it out to the standard output it has been started from or to one or more logfiles. Thanks to this concept, the to-be-debugged program has not to perform the logging itself.

For example, the testprogram included in the example/ directory will produce the following output:

```
0780e018 start (CLI  Shell Process, SyslogTest)
0780e018: This is a nice and entertaining testmessage
0780e018: brought to you by syslog!
0780e018 end   (CLI  Shell Process, SyslogTest)
0780e018 quit  (CLI  Shell Process, syslogd) (done)
```

As you can see, the message is prefaced with the task id of the logger, to let you identify the task.

The big advantage of SysLog is, that all programs compiled with the debugging information use one logfile/output for their messages in cronologic order. So you can exactly determine what happened in what order.

1.4 SysLog.guide/SysLog usage

```
Invoking the SysLog daemon:
===========================
```

The daemon is a program, running in the background and supplying the public message port the routines in the link library use.

You can control the daemon via the following commandline parameters:

```
SysLog [-hcrdlq] [filename...]
```

filename

When started, SysLog write the log to standard error channel per
default. Additionally, the output can be written in up to three
files, which can be specified at startup time.

Starting SysLog in another shell, when a copy is already installed,
will submit the specified options or parameters to the already
running process. If a new filename is specified it will be
appended to the list of logfiles.

-h
     This option prints a small usage table to the standard output.

-c<num>
     This option tells SysLog to close file number <num> and to stop
     writing the log-output to it.

-d<num>
     Temporarily disables the logging for file <num>.

-r<num>
     Restart the logging for file <num>.

-l
     Print a list of the current logfiles to the standard output.

-q
     Tell the SysLog daemon to quit.

Here's an exmaple for better understanding:

     1> SysLog

Nothing special happens. Now type this in another shell:

     2> SysLog T:Test
     2> SysLog -l
     File 0 FileHandle: 1e2b041 Flags: 00 Name: '*'
     File 1 FileHandle: 1e2b04f Flags: 00 Name: 'T:Test'
     File 2 FileHandle: 0 Flags: 00 Name: ''
     File 3 FileHandle: 0 Flags: 00 Name: ''
     2> SysLog T:Test2
     2> SysLog -l
     File 0 FileHandle: 1e2b041 Flags: 00 Name: '*'
     File 1 FileHandle: 1e2b04f Flags: 00 Name: 'T:Test'
     File 2 FileHandle: 1e2b051 Flags: 00 Name: 'T:Test2'
     File 3 FileHandle: 0 Flags: 00 Name: ''
     2> SysLog -d1
     2> SysLog -c2
     2> SysLog -l
     File 0 FileHandle: 1e2b041 Flags: 00 Name: '*'
     File 1 FileHandle: 1e2b04f Flags: 01 Name: 'T:Test'
     File 2 FileHandle: 0 Flags: 00 Name: 'T:Test2'
     File 3 FileHandle: 0 Flags: 00 Name: ''

Now type:

     1> SysLog -q

```
and SysLog will terminate.
```

1.5 SysLog.guide/For programmers

```
Adding SysLog support to your own programs:
===========================================
```

    A tried to make it as easy as possible to add the syslog routines
into your own programs. The only thing you'll need is the link library
and appropiate include file, depending on you preferred language.

    In C, just add

```
  #include <syslog.h>
```

and

```
    initsyslog()
    .
    .          /* your program */
    .
    uninitsyslog()
```

to your source code and you're ready to use the syslog0() call.
syslog0() requires the same parameters as C's standard printf() or
similar routines. In fact, it uses RawdoFmt() to handle the formatting.
Whenever you like to have something logged just insert a function call
to syslog0():

```
    syslog0("Just opened the dos.library.\n");
    syslog0("The library base is 0x%lx.\n", DOSBase);
```

In assembly language the usage is quiete similar:

```
    INCLUDE "syslog.i"

    jsr _InitSysLog
    .
    .          ; your program
    .
    jsr _UnInitSysLog()
```

    To call syslog0(), you may use the SYSLOG-macro included in the
assembly language include file as follows:

```
    SYSLOG <"Just opened the dos.library.">
    SYSLOG <"The library base is 0x%lx.">,(_DOSBase)
```

    This macro add the newline at the end of the textline automatically
for you. The parameters are pushed to the stack with the line:

```
    move.l  \1,-(SP)
```

To insert the contents of an address use the parameter like showed
above, to push an address (or a constant) use:

```
    SYSLOG <"The library base is stored in 0x%lx.">,#_DOSBase
```

The macro is only exanded in the program if the label DEBUG is set
not equal to zero. Including syslog.i sets DEBUG to 1 per default. You
may debug only certain parts of your program with changing the value of
debug depending on the part of the source:

```
    DEBUG    set     1
    .
    .                  ; buggy code
    .
    DEBUG    set     0
```

Now simply link the syslog.lib to your code, voilà!

ATTENTION: The library has been compiled with the SAVEDS feature of
SAS/C 6.x. Therefore, the routines may be used by several different
callers. However, due to this, you can't link the library to pure code.
I suggest you use normal code (c.o instead of cres.o) for the debugging
phase.

1.6 SysLog.guide/How to contact me

How to contact me:
==================

If you have any comments, enhancement requests or bug reports, or
just want to chat, feel free to contact me (e-mail preferred), under
one of the following addresses, e-mail preferred:

```
    SnailMail: Peter Simons        E-Mail: simons@peti.GUN.de (Usenet)
               Europaring 20
               53123 Bonn 1         Voice: +49 228 746061
               Germany
```