

July 3, 2012

MEMORANDUM

To:           SCRIPT Users

Subject:   UOW SCRIPT - VERSION(3.2) 78JAN13

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Although this programme has been tested by its developer, no warranty, expressed or implied, is made by the developer or the University of Waterloo, as to the accuracy and functioning of the programme and related programme material, nor shall the fact of distribution constitute any such warranty, and no responsibility is assumed by the developer or the University of Waterloo, in connection therewith.

Distribution of the current version of SCRIPT will be made to those users who submit a 1200 foot or larger reel of tape and a check or purchase order for twenty-five dollars (\$25 in Canadian funds) to cover costs of distribution. The distribution tape is the result of doing IEHMOVEs from 2314 disk to tape. The tape will be 9-track and 800 or 1600 BPI depending upon request. It is labelled 'SCRIPT' and contains the following datasets.

DSNAME	SEQ	CONTENTS
SCRIPT.TEXT	1	Object decks SPACE=(3200,(80,,3)) RECFM=FB,LRECL=80,BLKSIZE=3200
SCRIPT.FMEMO	2	Documentation (Recfm=FB, Unsequenced for CMS) SPACE=(3360,(500,,12)) RECFM=FB,LRECL=80,BLKSIZE=3360
SCRIPT.MEMO	3	Documentation (Recfm=VB, Unsequenced for OS) SPACE=(3360,(220,,12)) RECFM=VB,LRECL=84,BLKSIZE=3360
SCRIPT.SOURCE	4	Source SPACE=(3360,(200,,3)) RECFM=FB,LRECL=80,BLKSIZE=3360
SCRIPT.MACLIB	5	Macros and Copy Code SPACE=(3360,(800,,20)) RECFM=FB,LRECL=80,BLKSIZE=3360
SCRIPT.LOAD	6	Load module SPACE=(7294,(40,,3)) RECFM=U,LRECL=7294,BLKSIZE=7294
SCRIPT.SYSHYPH	7	Hyphenation Exception Dictionary SPACE=(3360,(20)) RECFM=VB,LRECL=80,BLKSIZE=3360
SCRIPT.TSO	8	Alternate TSO Interface material SPACE=(3360,(120,,3)) RECFM=FB,LRECL=80,BLKSIZE=3360

Following is suggested JCL to assemble and linkedit one new member '??' into SCRIPT for use under OS. Note that source members CMScript and TSOCript are not assembled this way.

```
//?? JOB '#####',T=1,P=200'
//* SCRASLK - TO ASSEMBLE AND LINK A SCRIPT MODULE
//STEP1 EXEC PGM=ASMGASM,REGION=150K,
//          PARM='TERM'
//SYSLIB DD DSN=SCRIPT.MACLIB,DISP=SHR
//          DD DSN=SYS1.MACLIB,DISP=SHR
//SYSUT1 DD DSN=SYSUT1,DISP=(NEW,DELETE,DELETE),
//          SPACE=(CYL,(6,1)),UNIT=2314
//SYSUT2 DD DSN=SYSUT2,DISP=(NEW,DELETE,DELETE),
//          SPACE=(CYL,(8,2)),UNIT=(2314,SEP=SYSUT1)
//SYSUT3 DD DSN=SYSUT3,DISP=(NEW,DELETE,DELETE),
//          SPACE=(CYL,(8,2)),UNIT=(2314,SEP=(SYSUT1, SYSUT2))
//SYSPRINT DD SYSOUT=A
//SYSTEM DD SYSOUT=A
//SYSLIN DD DSN=SCRIPT.TEXT(??),DISP=OLD
//SYSIN DD DSN=SCRIPT.SOURCE(??),DISP=SHR
//LKED EXEC PGM=LINKEDIT,REGION=180K,
//          PARM='LIST,XREF,NCAL,SIZE=(180K,50K)'
//SYSPRINT DD SYSOUT=A
//SYSUT1 DD DSN=SYSUT,DISP=(NEW,DELETE,DELETE),
//          SPACE=(CYL,(1,1)),UNIT=2314
//MODLIB DD DSN=SCRIPT.TEXT,DISP=SHR
//SYSLMOD DD DSN=SCRIPT.LOAD,DISP=OLD
//SYSLIN DD *
//          INCLUDE MODLIB(SCRIPTW)
//          INCLUDE MODLIB(SCRIPTCW)
//          INCLUDE MODLIB(SCRIPTFO)
//          INCLUDE MODLIB(SCRIPTHY)
//          INCLUDE MODLIB(SCRIPTMC)
//          INCLUDE MODLIB(SCRIPTOU)
//          INCLUDE MODLIB(SCRIPTPM)
//          INCLUDE MODLIB(SCRIPTRD)
//          INCLUDE MODLIB(SCRIPTSY)
//          INCLUDE MODLIB(SYSINT)
//          ENTRY SCRIPTW
//          NAME SCRIPT(R)
/*
```

The inclusion of SCRIPTHY, the hyphenation routine, may be deleted to save some 12K in the size of the module. Harmless Unresolved External References will result and the Hyphenation (.HY) facilities may not be used.

Following is a suggested procedure for running SCRIPT in OS batch.

```
//SCRIPT    PROC  PROG=SCRIPT,SCRIPT=,SIZE=128K
//SCRIPT    EXEC  PGM=&PROG,PARM='&SCRIPT',REGION=&SIZE
//*
//*          S C R I P T
//*
//STEPLIB   DD   DSN=SCRIPT.LOAD,DISP=SHR
//SYSHYPH   DD   DSN=SCRIPT.SYSHYPH,DISP=SHR
//SYSPRINT  DD   SYSOUT=A
//SYSTEM    DD   SYSOUT=A
```

Following is a suggested procedure for formatting a SCRIPT manual in OS batch.

```
//SCRIPTMN  PROC  PROG=SCRIPT,MEM=SCRIPT,SCRIPT=,SIZE=160K
//          EXEC  PGM=&PROG,PARM='&SCRIPT',
//          REGION=&SIZE
//*
//*          TO FORMAT AN OFFLINE SCRIPT MANUAL
//*
//STEPLIB   DD   DSN=SCRIPT.LOAD,DISP=SHR
//SYSHYPH   DD   DSN=SCRIPT.SYSHYPH,DISP=SHR
//SYSPRINT  DD   SYSOUT=A
//SYSTEM    DD   SYSOUT=A
//SYSLIB    DD   DSN=SCRIPT.MEMO,DISP=SHR
//SYSIN     DD   DSN=SCRIPT.MEMO(&MEM),DISP=SHR
```

Then to format a SCRIPT Reference Guide, run the following job:

```
//SCRIPTMN  JOB   '#,T=2,P=200'
//          EXEC   SCRIPTMN
```

Note that using the default PASS=1 option causes the table of contents to print at the end of the manual. To make the table of contents print at the start, after the header page, add PASS=2 to the parm field.

Member SYSPUB within SCRIPT.MEMO contains a sample set of SCRIPT high level Macros for formatting a thesis or other research report in chapters and sections with an automatic Table of Contents and Figure, Footnote and Table numbering. To format documentation for SYSPUB that uses SYSPUB with automatic hyphenation:

```
//SYSPUBMN  JOB   '#,T=1,P=50'
//          EXEC   SCRIPTMN,MEM=SYSPUBMN,SIZE=250K
```

To format an Introduction to SCRIPT that uses SYSPUB with automatic hyphenation:

```
//SCRINTRO JOB '#,T=1,P=50'  
//      EXEC  SCRIPTMN,MEM=SCRINTRO,SIZE=250K
```

To format a SCRIPT Techniques Guide that uses SYSPUB with automatic hyphenation:

```
//SCRIPTNI JOB '#,T=1,P=50'  
//      EXEC  SCRIPTMN,MEM=SCRIPTNI,SIZE=250K
```

To format a sample SCRIPT Reference Card:

```
//SCRIPTCD JOB '#,T=1,P=20'  
//      EXEC  SCRIPTMN,MEM=SCRIPTCD
```

The following discourse concerns generating and running SCRIPT under CMS.

Since the distribution tape is in unloaded IEHMOVE format the data must be restored using the IEHMOVE facilities of the TAPEPDS and TAPEMAC commands, except SCRIPT.SYSHYPH which is a sequential file.

Source member CMSSCRIPT is the SCRIPT interface routine. Assembling CMSSCRIPT requires SCRIPT.MACLIB and CMSLIB. The CMSSCRIPT TEXT deck produced includes an ordered table of V-cons which forces the CMS LOADER to automatically include all of the required SCRIPT TEXT decks. To generate the SCRIPT MODULE which includes SCRIPT's interface routine perform the following:

```
LOAD CMSSCRIPT (CLEAR  
GENMOD SCRIPT (FROM CMSSCRIPT
```

To assemble the source decks of SCRIPT requires SCRIPT.MACLIB and the OS macros from the CMS equivalent of SYS1.MACLIB. The SCRIPT source decks that you may wish to assemble all have filenames of pattern 'SCRIPT\*' and 'SYSINT'.

Under CMS there is support to type a file "SCRIPT MEMO Y" in response to a filename containing a '?'. The following is a suggestion for this file:

## SCRIPT

## SCRIPT

FORMAT:     Scrip fname ( option1 ... optionN )  
                   where fname has filetype of SCRIPT  
                   and fname '?' for HELP.

OPTIONS:     (Capital letters indicate minimum length,  
                   default comes first)

Terminal (or Online NOFile) - output goes to terminal  
 Memo     (or Online File ) - output goes to 'fname MEMO'  
 Disk     (or Offline File ) - output goes to 'fname LISTING'  
 Printer   (or Offline NOFile) - output goes to printer  
 NOPrint                    - no output produced

NOADjust/ADjust     - thirty columns from left margin  
 NOCenter/CENTER    - same as ADJUST  
 NOCont/Continue    - continue in spite of errors  
 NODEBUG/DEBUG      - for program debugging features  
 Format/NOFormat     - to disable text formatting  
 LOcal/GLObal        - to define positional call arguments  
 NOMark/Mark         - to indicate start of text lines  
 NONumber/NUmber    - to show filename and record number  
 PROFile/NOPROFile - to imbed "PROFILE SCRIPT"  
 NOQUIet/QUIet      - to suppress ONLINE version message  
 NOSCREEN/SCREEN    - for ONLINE output to a CRT  
 SIX/EIGHT          - initial six or eight lines per 11" page  
 NOSTAT/STAT        - statistics on error file  
 NOSTop/STop        - wait at bottom of each page  
 NOTrans/TRans      - uppercase conversion of output  
 ONEPass/TWOPass    - number of passes to produce output  
 UPper/NOUPper      - reference names to uppercase  
 WAIT/NOWAIT        - prompt for first ONLINE page insertion

ADjust=<0|nn>        - adjust output from left margin  
 BMargin=<6|nn>      - default BOTTOM MARGIN  
 CENTER=<0|nn>       - same as ADJUST  
 Continue=<0|n>      - continue for number of errors  
 DArk=<1|n>          - DARK Offline Output  
 FFCHannel=<1|n>     - printer channel skip to align page  
 FFTop=<3|n>         - line number of page with channel skip  
 FMargin=<1|nn>      - default FOOTING MARGIN  
 FNSize=<200|nn>     - max outstanding footnote lines  
 HMargin=<1|nn>      - default HEADING MARGIN  
 HSFSover=<9|nn>     - Top Title/Bottom Title overlap  
 LINenum/LEGalnum=<0|nn> - print page line number in column nn  
 LLength=<60|nn>     - default LINE LENGTH  
 NUmber=<0|nn>       - same as NUMBER in column nn  
 PAge=<1|mm<:nn>>    - output from page mm to page nn  
 PASSes=<1|nn>       - number of passes to produce output  
 PLength=<66|nn>     - default PAGE LENGTH  
 RMSize=<200|nn>     - max records per remote  
 SEQCol=<240|nn>     - sequence column on variable files  
 SRLen=<150|nn>      - max length of character value  
 TABLeft=<0|1>       - left tab adjustment  
 TMargin=<6|nn>      - default TOP MARGIN

&string value        - set reference value externally

The following concerns an experimental program called NSCATS that can convert most of an ATS Archive Document to SCRIPT Input format (RECFM=V, unsequenced). The source is in SCRIPT.SOURCE(NSCATS) and should be compiled with PL1/F. The load module is in SCRIPT.LOAD(NSCATS). To use it requires the following JCL:

```
//NSCATS JOB '#,T=1,P=20'
//          EXEC PGM=NSCATS,REGION=100K
//STEPLIB DD DSN=SCRIPT.LOAD,DISP=SHR
//SYSPRINT DD SYSOUT=A
//SYSUT1 DD DSN=ATS.ARCHIVE,UNIT=2400,VOL=SER=??????,
//          DISP=OLD,LABEL=(2,BLP),
//          DCB=(RECFM=F,LRECL=3100,BLKSIZE=3100)
//SYSUT2 DD DSN=SCRIPT.INPUT,UNIT=2314,VOL=SER=??????,
//          DISP=(NEW,KEEP),SPACE=(TRK,(10,10)),
//          DCB=(RECFM=VB,LRECL=244,BLKSIZE=3520)
```

This version of SCRIPT should run successfully under TSO. A sample TSO interface routine is provided in source member TSOCRIP. This routine is not completely up to date -- see comments at start of code. A second TSO interface routine which is larger and more up to date is found in file 'SCRIPT.TSO'. See member 'NOTES' within this file for more information. To make SCRIPT compatible with the TSO Editor, sequencing in first eight columns of variable length files is supported via the SEQCOLUMN= parameter.

This current version of SCRIPT was assembled with Assembler (G) V2L7a. Though not every routine was tested, it is expected that Assembler (H) or the IBM VS/VM System Assembler, Assembler (XF) may also be used. It should be noted that any possible future versions may again be resequenced and possibly restructured.

This tape is being distributed with no warranty, expressed or implied. The Department of Computing Services is interested in receiving bug reports and ideas for extensions. Moreover, we ask that any extensions made to this package be reported and if possible, that the source changes be made available.