



CICS terminal printer spooling system



Printer Spooling for CICS

CICS/Spooler is a terminal printer spooling system for CICS which improves throughput of printer-oriented programs. It also simplifies programming by eliminating the complexities of various types of printers, allowing for restart, recovery, multiple copies, etc. To spool a report from a CICS program, simply move your print-line into our commarea and link to our program. Passing an optional header line allows you to specify printer-id, user name, report title, number of copies, etc. You may view your reports on a CRT before deciding if you want to print them.

JES and POWER BATCH Interface

CICS/SPOOLER uses its own VSAM file for storing reports. Reports which were spooled to the VSE/POWER queue or JES queue by batch jobs may be loaded into the CICS/SPOOLER queue with a utility we provide, or batch jobs may spool directly to the CICS/SPOOLER queue. Any report in the CICS/SPOOLER queue may be sent to any CICS printer or re-spooled to VSE/POWER or JES. Reports may be printed automatically or held for review by the end user before printing.

VSE/POWER CICS interface

CICS/SPOOLER contains a full function VSE/POWER interface. POWER queue entries can be viewed with full scrolling support and character string searching. VSE/POWER LST queue entries can be printed directly to any CICS printer without first spooling them to the CICS/SPOOLER queue. VSE/POWER entries can be deleted or changed online through CICS/SPOOLER. A similar JES CICS interface is not included in this package. However, JES queue jobs can be spooled to the CICS/SPOOLER queue and viewed in CICS.

Report splitting

Reports can be segmented to load only part of a report into the CICS/SPOOLER queue or a report can be split into several segments and sent to different users.

Other features

A purge program automatically deletes old reports and reorganizes the CICS/SPOOLER queue file. Printers may be limited to printing jobs with a certain form-id to stop other users from printing while your special forms are on the printer. Forms Control Buffer (FCB) emulation is supported.

CICS/SPOOLER is year 2000 compliant.

Unlike IBM's CICS report controller feature, CICS/Spooler allows full printer sharing with any other CICS or VTAM application.

Autolog facility allows a message to be written to a CICS transient data queue or the system console whenever a user performs a CICS/Spooler function.

Even with all these features, CICS/SPOOLER is still the lowest priced CICS printer spooling system on the market.



Menu Driven

CICS/SPOOLER is fully menu driven, but transaction ids can be entered as a "FAST PATH" to bypass menus.

```
SPOM21

CICS/SPOOLER Main Menu
MACKINNEY SYSTEMS

1: Display CICS/SPOOLER Queue
2: Alter Printer Information
3: Update User Profile
4: Display the Printer Queue
9: Display VSE/Power Queue

Option ==> ___
```

Using option 1 allows you to display the CICS/SPOOLER queue. By specifying criteria to select queue entries you can select by jobname (or a jobname prefix), user id, printer, form id, terminal id, class, number of pages, report creation date, or spooler status.

No limitations were entered on screen SPOM23 in this example. Therefore, all eligible entries on the CICS/SPOOLER queue will display on screen SPOM25; however, a security system is provided to limit what a user may have access to.

CICS/SPOOLER queue entries can be viewed, printed, or deleted. Entering a 'V' allows you to view the report LCTRUN (bottom screen).

```
SPOM25
                                        CICS/SPOOLER Queue Directory
                                                      MACKINNEY SYSTEMS
                                                                                                                                 PAGE 001 OF
                                                                                                                                                              1
JOBNAME-NUMBER USER_ID S D C DATE TIME PAGES FORM CPY H PRINTER GLOPRT 5064 CSPP 2 H A 960220 1528 3 001 N P01____
    HOTPRT 9844 <u>RJS1</u> 2 H A 960218 0830 SAMPLE HOTPRINT REPORT1
                                                                                                                       001 N P01
    SAMPLE HOTPRINT REPORT2

LCTRUN 5203 DLM1 2 H A 960212 1425
                                                                                                    4 _____ 001 N P01
                                                                                                              _____ 001 N P01_
V LCTRUN

      LCTRUN
      5203
      DLM1
      2 H A 960222
      1425

      JDCAMS
      - LISTCAT
      2 H A 960221
      0923

      SPOP760E
      5122
      SPOPUSER 2 H A 960221
      0923

      SPOP760E
      - REPORT1

      SPOP760E
      5124
      SPOPUSER 2 H A 960221
      0940

      SPOP760E
      - REPORT2

                                                                                                     1 TESTFORM 001 N *PRINTER
                                                                                                     4 TESTFORM 002 N *PRINTER
FUNCTIONS: V=View P=Print S=Show detail 5=Delete I=Immed print PF1-Help PF2-Refresh PF3-End PF6-PRTQ PF7-Back PF8-Forw CLEAR-Exit PF9-Top PF12-Bottom
```

When viewing a report, full function scrolling is supported. You can also scan for a character string.

```
CICS/SPOOLER Queue View Report
SPOM25
                                                                  PAGE COL LINE
    REPORT: IDCAMS - LISTCAT USER: DLM1 SCN:

IDCAMS SYSTEM SERVICES
                                                                  1 1 1
                                                                 TIME: 09:33:2
                                LISTING FROM CATALOG -- VSESP.USER.CATALOG
CLUSTER -----CICSTEST.CLRADHV.MASTER
     HISTORY
       OWNER-IDENT-----(NULL)
                                     CREATION-----95.347
                                     EXPIRATION------00.000
     RELEASE-----2
PROTECTION-----(NULL)
     ASSOCIATIONS
DATA----CICSTEST.CLRADHV.DATA
       INDEX----CICSTEST.CLRADHV.INDEX
    DATA-----CICS.CLRADHV.DATA
INDEX----CICSTEST.CLRADHV.INDEX
  DATA ---- CICSTEST CLRAHV DATA
    HISTORY
     OWNER-IDENT-----(NULL)
RELEASE-----2
                                   CREATION-----95.347
                                   EXPIRATION-----00.000
    PROTECTION----- (NULL)
    ASSOCIATIONS
PFK: 1-Help 3-End 5-Scan 7-Back 8-Forw 9-Top 10-Left 11-Right 12-Bot Clear-Exit
```



Split Mode

This function allows the left portion of the report to remain fixed while the right portion of the report is shifted to the right to view columns that do not fit on the screen. The left and right portions of the report are separated by the '|' character. The number of columns that make up the left portion of the screen is based on the cursor position when the PF2 (Split) key is pressed.

To enable the SPLIT function, position the cursor within the report line area of the screen, lines 4 to 23 and columns 1 to 60 for model 2, 3, or 4 terminals or columns 1 to 110 for model 5 terminals, and press the PF2 (Split) key.

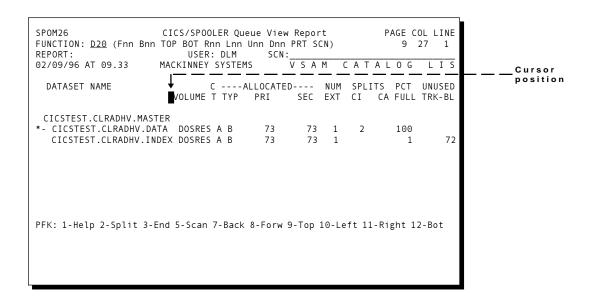
To disable the SPLIT function, position the cursor outside the report line area of the screen (lines 1, 2, 3, and 24) and press the PF2 (Split) key.

While in SPLIT mode the value shown in the COL field on the screen is the starting column for the right portion of the screen.

When the SPLIT function is active, the SCAN function can not be used.

Split Mode Example

The following screen contains a report about datasets used in the system. When NOT using the SPLIT mode, the 'CI SIZE' column will not display on the same screen as the 'DATASET NAME' column. In order to view both the 'DATASET NAME' column and the 'CI SIZE' column, position the cursor immediately to the left of the word VOLUME and press PF2 (Split).



After pressing the PF2 (Split) key the following screen is displayed. Notice the 'COL' field on the screen displays the starting column position of the right portion of the report and the '|' character separates the left and right portions of the report.

SPOM26 CICS/SPOOLER Queue View Report PAGE COL LINE FUNCTION: D20 (Fnn Bnn TOP BOT Rnn Lnn Unn Dnn PRT SCN) 9 27 1 REPORT: USER: DLM SCN: 02/09/96 AT 09.33 MAC KINNEY SYSTEMS V S A M C A T A L O G L I S							
02/09/96 AT 09.33 MAC	KINNEY SYSTEMS	V S A M C A	TALOG LIS				
DATASET NAME	CALLOCATE VOLUME T TYP PRI	D NUM SPL SEC EXT CI					
CICSTEST.CLRADHV.MASTER *- CICSTEST.CLRADHV.DATA CICSTEST.CLRADHV.INDEX	DOSRES A B 73 DOSRES A B 73	73 1 2 73 1	100 1 72				
PFK: 1-Help 2-Split 3-End 5-Scan 7-Back 8-Forw 9-Top 10-Left 11-Right 12-Bot							



Automatically
Transfer
Reports
from JES or
POWER to
CICS/
SPOOLER
with little or
no JCL
Changes!

A CICS/SPOOLER batch program can be used to automatically transfer reports from the system spool queue (JES or VSE/POWER) to the CICS/SPOOLER queue. After the transfer the report can be printed on any CICS printer. Reports can be segmented to load only part of a report or a report can be split into multiple segments and sent to several different users (segmentation).

A CICS/SPOOLER program is started and continues to run during the time reports need to be automatically transferred. Reports can be transferred based on their Class and/or Formid. The JCL used to produce a report need only specify the correct class and Formid to be processed by CICS/SPOOLER.

Header Control

The report header contains the information necessary to route a batch report from the system spool (VSE/POWER or JES) to the CICS/SPOOLER VSAM file. Header information can be report text, a parameter card input (VSEonly), or on a file (maintained by online screens similar to the following).

```
01/25/96 17:41
SPOM56
               CICS/SPOOLER Batch Report Header Update
                                                            Current Mode: UPDATE
    JOB Name: GLOPRT___
 Description: _
                            <u>MacKinney Systems</u>
                                                              Segments: N Y/N
CICS Printer ID: P01
User Name: CSPF
Number of Copies: 001
Header/Trailer:
                                        ( Y or N )
( P, D, H or L)
(K or D)
Disposition:
                  D
Jes/Power disp:
Form ID:
Class:
Days:
                   <u>010</u>
Use FCB Emulation: N Y/N
  FCB Channel: 1 2 3 4 5 6 7 8
                                                                   D
 Report Line: _
ENTER=Update
                    PF1=Help
                                                        PF5=Segments
                                      PF3=End
 PF9=ToggleMode PF12=Cancel
```

Segmentation Control

The batch segment contains the information necessary to create a report segment from a system spool (VSE/POWER or JES) batch report in the CICS/SPOOLER VSAM file. Header information can be provided in the report text, parameter card input (VSE only), or on file (maintained by online screens similar to the one above.

```
SPOM58
                                                                                                                01/25/96 17:41
                                        CICS/SPOOLER Batch Segment Update
                                                                                                      Current Mode: UPDATE
JUB Name: DEFAULT Segment Pass: 010 Seq: 010 Description: FIRST_SEGMENT___
                                                                            Oper Len Line Col Boundary
EQ 13 01 001 L P-Page/L-Line
EQ 12 01 001 L P-Page/L-Line
  START: PAYROLL START
STOP: PAYROLL END
 Optional SEGMENT Overrides
 CICS Printer ID: DEFAULT DEFAULT Number of Copies: 001 Header/Trailer: N Disposition: D DEFAULT DISPOSITION:
                                                                                ( Y or N )
( P,D,H or L )
(K or D )
  Form ID:
Class:
                                   <u>010</u>
  ENTER=Update
                                          PF1=Help
                                                                                   PF3=End
 PF9=ToggleMode
                                          PF12=Cancel
```



Controlling the Printers

Print requests are printed using a logical printer profile which assigns attributes to the physical printer. A physical printer can have multiple logical printer profiles. This provides flexibility for your physical printers to not print all reports the same. Following is a sample printer profile.

```
CICS/SPOOLER Printer Profile Update
SPOM33
                                                     MACKINNEY SYSTEMS
Profile ====> T01B
                                       DSCAPE Optional description for this profile
Maximum number of characters per line (80-255, 256
Release the printer from CICS after printing (Y-N)
Page eject (F-First, L-Last, N-None, B-Both
Description => TO1B_LANDSCAPE_
Width ======> \frac{132}{R} Release ====> \frac{N}{E}
                                                                                                                         256)
                                       S-Special)
Printer honor return cursor command (Y-N)
Ret. Cursor => Y
Extra EOB NL=> \frac{N}{N}
Buffer Size => \frac{2}{N} K
CICS Termid => \frac{701B}{N}
                                        Insert extra NL at end of each print buffer (Y-N)
                                        Maximum buffer size sent to the printer (1, 2, 4) Target CICS terminal ID for this printer
PF1-Help PF3-End
                                 PF4-Cancel
                                                        CLEAR-Exit
```

The Printer Profile Translate Table is used to remove unprintable characters from the print data stream to prevent hardware errors. The printer profile translate table contains all 256 possible hexadecimal values. This allows for any hex value in the print data stream to be translated to another hex value. This feature keeps unwanted hex values from being sent to the printer.

The area immediately to the right of the translate table is the EBCDIC representation of the line's sixteen hexadecimal values.

```
SPOM53
                     CICS/SPOOLER Printer Translate Table
                               MACKINNEY SYSTEMS
Profile ===> T01B
                      Description ===> T01B LANDSCAPE
   40 40 40 40 40 40 40 40
                                  4A 4B
                                         4C
   50 40
60 61
         40 40 40 40 40 40 40 40 5A 5B 5C
40 40 40 40 40 40 40 6A 6B 6C
40 40 40 40 40 40 79 7A 7B 7C
         82 83 84 85 86 87
92 93 94 95 96 97
                            88 89 40 40 40 40 40 40
98 99 40 40 40 40 40 40
                                                       abcdefghi
                                                      jklmnopar
                   A5
                        Α7
                            Α8
                               Α9
                                  40 40 40 40 40 40
                                                       ~stuvwxyz
  {ABCDEFGHI
                                                     }JKLMNOPQR
  E0 40 E2 E3 E4 E5 E6 E7 E8 E9 40 40 40 40 40 40 \STUVWXYZ
F0 F1 F2 F3 F4 F5 F6 F7 F8 F9 40 40 40 40 40 40 0123456789
PF1-Help
         PF3-End PF4-Cancel
                                   CLEAR-Exit
```

The Printer Profile Command Codes are sent to the printer before printing starts and after printing is completed. This feature is useful to change the characteristics of the printer, (i.e., changing the page orientation from landscape to portrait).

Two command code areas are available. The first is the Pre-print printer command codes (sent to the printer before printing starts) and the second is the Post-print command codes (sent to the printer after printing is complete).

Normally, several command codes are needed to make an escape sequence the printer will understand. For example, to change the orientation to landscape for an HP LaserJet II the escape sequence 1B266C314F is required as shown below.

SPOM62	CICS/SPOOLER Printer Command Codes MACKINNEY SYSTEMS	
Profile ===> T01B	Description ===> T01B LANDSCAPE	
Pre-print printer c	ommand codes	
Post-print printer	command codes	
PF1-Help PF3-End	PF4-Cancel CLEAR-Exit	



Print Queue Directory

The CICS/SPOOLER Print Queue Directory is obtained using option '4' from the Main Menu. This screen shows the status of print requests for reports in the CICS/SPOOLER VSAM file or the VSE/POWER queue entries (VSE only) which have been designated to be printed by CICS/SPOOLER on a CICS printer. On this screen the print priority may be changed to allow for 'HOT' reports to be printed first.

```
SPOM47 CICS/SPOOLER Print Queue Directory
Mask ==> ____ MACKINNEY SYSTEMS PAGE 1 OF 1

OPT PRINTER JOBNAME NO. SFX QUEUE STATUS PRI PROFILE
_ TO1C SPOP760E 1 VSAM 3-WAITING 7 TO1C
_ TO1C MSGMST 21170 LST 2-PRINTING 7 TO1C
_ TO1C DPMMST 21175 LST 1-RELEASED 7 TO1C
_ TO1C FAXMST 175 VSAM 1-RELEASED 7 TO1C
_ TO1C FAXMST 175 VSAM 1-RELEASED 7 TO1C

FUNCTIONS: S=Show detail 5=Delete
PF1-Help PF2-Refresh PF3-End PF7-BWD PF8-FWD PF9-Top PF12-Bottom
CLEAR-Exit
```



Those report entries on the previous screen showing VSAM in the QUEUE column are from the CICS/SPOOLER VSAM file while those with LST in the QUEUE column are in the VSE/POWER list queue and have been designated to be printed on a CICS printer by CICS/SPOOLER. This is controlled using the CICS/SPOOLER Automatic Print Control feature as shown on screen SPOM44 below. Reports designated in this way are printed directly without having to be transferred to the CICS/SPOOLER VSAM file.

Automatic Print from the VSE/POWER LST queue (VSE Only)

CICS/SPOOLER Automatic Print Control will scan the VSE/POWER LST queue for reports to be printed. Selection is based on class, destination, formid, and jobname.

```
SPOM44
                        CICS/SPOOLER Automatic Print Control
                                    MACKINNEY SYSTEMS
                                                                           Page 1 of 1
Seq Profile Class
000010 P01 P
000020 P02 Q
000030 P03
                                       Form Job Name
                                                             Description
                                                          CLASS P TO P01
CLASS Q TO P02
PAYROLL TO P03
                                                PAY*
000040
000060
000070
000080
000090
000100
000110
000120
000130
000140
000150
Locate Profile ==>
            PF2-Add PF3-End PF4-Cancel
PF1-Help
                                                   PF5-Locate
                                                                   PF7-Bwd
PF8-Fwd
            PF9-Top
                        PF12-Bot CLEAR-Exit
```



Displaying the VSE/POWER Queue

CICS/SPOOLER allows displaying the VSE/POWER queue. Selection screen SPOM22 allows limiting the queue entries that are displayed. You can select entries based on jobname (or prefix), class, user, formid, queue, status (disposition), number of pages, or job creation date.

SPOM22	CICS/SPOOLER VSE/POWER Menu MACKINNEY SYSTEMS				
Enter optional parameters below to limit power queue entries to be displayed					
Jobname ==> Class ===> _ User ====>	(PREFIX OR ENTIRE NAME)				
Form-ID ==> Queue ===> L Status ===> Pages ====> Date ====>	(L-LST, R-RDR, P-PUN or X-XMT) (D-Ready, H-Hold, K-Keep, L-Leave, *-Active) (EQ-Equal, GT-greater, LT-Less) number of pages (EQ-Equal, GT-greater, LT-Less) report creation date in CCYYMMDD format or leave blank to use current date				
PF1-Help PF3-End	CLEAR-Exit				

```
SPOM24
QUEUE: LST
                                          CICS/SPOOLER VSE/POWER Display MACKINNEY SYSTEMS
                                                                                                            PAGE 001 OF
                                                                                                       CPY D P C S DEST
001 D 9 A DLM1
001 D 8 A DLM1
001 D 8 A DLM1
001 D 8 A SEC1
001 D 3 A BAL1
001 D 3 A BAL1
001 D 3 A DLM1
001 D 3 A DLM1
001 D 3 A SEC1
001 D 3 A BAL1
                                                                                                        CPY D P C S DEST
    JOBNAME
                                   USER DATA
                                                            PAGES FORM DATE TIME
                   JOBNO
   XFER1
                    00294 ADMIN, VSE, DLM1
                                                                                021296 0819
    SPOJCSD
                    00304
                                                                                021295 1020
    SPOJCSD
                    00305
                                                                 11
                                                                                021296 1025
    FICSAME
                    00359 ADMIN, MISC
                                                                               021396 1244
   FICDIFF
                    00364 ADMIN, MISC
                                                                                021396 1248
    LCTRUN
                   00407 MAINT, VSE, BAL1
                                                                                021496 0723
                   00409 MAINT, VSE, BAL1
00410 MAINT, VSE, BAL1
00457 ADMIN, CICS, DLM1
    LCTRUN
                                                                                021496 0737
    LCTCAT
                                                                 15
                                                                                021496 0742
                                                                               021496 1232
021496 1650
    CICSTES2
                                                                 98
   MACKUSS
                   00541 MAINT, VSE, DLM1
                                                                110
    IDOSEQ
                    00651
                                                                               021596 1310
    IDOSEQ
                    00657
                                                                               021596 1314
   FICVSAM 00663 ADMIN,MISC
SP0B766R 00676 MISC,VSE,DLM1
                                                                               021596 1330
021596 1425
                                                                   2
    GSRMAINL 00680
                                                                 36
                                                                                021596 1451
   LCT00
                   00692 DEVEL, LCT, BAL1
                                                                109
                                                                                021596 1330
FUNCTIONS: V=View P=Print Options 5=Delete S=Show Detail PF1-Help PF2-Refresh PF3-End PF6-PRTC PF7-Back PF8-Forw CLEAR-Exit
                  PF12-Bottom
```

LST AND PUN queue entries allow copies, priority, class, status, and destination to be changed by over-keying the field with the new value. Entries can be viewed, printed, or deleted. Entries can either be spooled to the CICS/SPOOLER queue or printed directly on a CICS printer. When viewing a VSE/POWER queue entry, full function scrolling is available. 'Find' allows you to browse an entry to locate a text string. A 'V' by job 'LSTCAT' produces this screen.

QUEUE: LST C	ICS/SPOOLER	Viewing I	Facility	L	ine =	:==> 9	96	
SEARCH ===>						. ===> SCR		
Job Name: LSTCAT No: 00410 sfx: 00 Lines: 000567 Status: READY Class: A								
+10 +20								
02/14/96 AT 07.42 M								
DATASET NAME						TS PCT		
	VOLUME T TY	/P PRI	SEC	EXT	CI	CA FULL	TRK-BLK	
CICSTEST.ADHPIC.VS.IND		7.0	70			20	F.0	
CICSTEST.ADHPROC.VS.DA	SYSWK1 A B	/3	/3	1		20	58	
*	SYSWK1 A B	1005	210	2/1 1	21.0	20 100		
CICSTEST.ADHPROC.VS.IN		1033	213	J4 I	210	25 100		
CICSTEST : NOT ROC. VS. IN	SYSWK1 A B	73	73	2		54	66	
*+CICSSTEST.ADVLST.VS.DA				1	1	14		
CICSTEST.ADVLST.VS.IND								
	DOSRES A B	73	73	1		2	70	
CICSTEST.APPLIC.PARMS.								
*+		2044	292	1		14	1752	
CICSTEST.APPLIC.PARMS.								
	SYSWK1 A B				_	0	73	
*-CICSSTEST.CLRADHV.DATA	A DOSRES A E	3 /3	/3	1	2		70	
CICSTEST.CLRADHV.INDE					£± 11	1	72 	
PFkeys: 1=Help 3=End 5=	-rinu /=Backi	wu o=Forw	u 9=10p .	L⊎≓Le	1 L 11	=rignt 12	=BOLCOM	

This report (from our LISTCAT PLUS VSAM catalog list product) is in the VSE/POWER queue. You can shift left and right to view a line up to 255 characters. Mod 5 screens are supported so you can see a full 132 character line at once.



CICS/SPOOLER features

- 1. Simpler programming uses standard ASA print control characters.
- 2. Faster response time for printer oriented tasks.
- 3. Faster printing with less CICS overhead.
- 4. Automatic (optional) header and trailer pages with report name and user name. Banner page exit is available.
- 5. Multiple copies.
- 6. Simultaneous spool and print capability.
- 7. Single report may be spooled by series of tasks or a single task.
- 8. Send reports to any CICS printer or printers. Menu screens with on line HELP make it easy to enter commands for CICS/SPOOLER.
- Reports spooled by batch jobs (VSE or MVS) can be printed on CICS printers. Printing may be started automatically or the report may be held until a print request is entered by the user.
- Reports spooled by CICS tasks can be re-spooled to POWER or JES.
- A routine to extract data from the POWER queue or send commands to POWER is included. It can be called from batch programs or invoked via JCL.
- 12. Display reports in the SPOOLER queue or VSE/POWER queue on a CRT.
- 13. Contains the ability to write reports directly to the SPOOLER queue from batch programs by a called subroutine. (Under MVS, Spooler files must be closed while this is done.)
- 14. Security system limits access to reports and printers to authorized terminals or operators.
- 15. Route lists allow reports to be sent to several printers automatically.
- 16. May stop printing, restart, or print only selected pages.
- 17. Support for 132 position CRTs.

- 18. A form-id may be assigned to a printer to limit it to printing reports with the same form-id.
- A purge/reorganization program is included to automatically purge old reports.
- 20. FCB emulation supports skips to channel 2-12.
- 21. A SCAN function allows you to find all occurrences of a character string in a report.
- 22. Report segmentation is available when loading batch reports to the CICS/SPOOLER queue. Reports can be segmented to load only part of a report or split into several segments to go to several users.
- 23. Pool lists allow reports to be sent to the first available printer within a pool.
- 24. A physical printer may have more than one printer profile to allow for printing to the same printer with different options. For example, ProfileA could be used to print in landscape mode and ProfileB could be used to print in Portrait mode.
- 25. Automatic Print Control (VSE only) automatic print selection from the VSE/power LST queue allows a report to be printed on a CICS printer without manual intervention.
- 26. Supports line length up to 255 characters.
- 27. The print queue for each printer may be displayed showing which report is printing and which reports are next to be printed. Priority of any report waiting to be printed may be changed to allow a "HOT" report to print next.
- 28. The command codes assigned to CICS/SPOOLER functions may be customized to the user's needs.
- 29. Split column viewing allows for the left portion of the report to remain on the screen while the right side is scrolled to the left or right.
- 30. CICS/SPOOLER is year 2000 compliant.
- 31. Autolog facility allows a message to be written to a CICS transient data queue or the system console whenever a user performs a CICS/SPOOLER function.