

Main Objects - Function 31

- User Profile - Function 31.1
- Logical Printer - Function 31.2
- Allocation Table - Function 31.3
- Printer - Function 31.4

User Profile - Function 31.1

A user profile contains information about the logical printers to be used. For each WRITE (*rep*) statement a logical printer is defined. For example, if the statement WRITE (2) is executed, the second logical printer contained in the currently active user profile will be used to describe the characteristics of the reports produced by the WRITE (2) statement.

You can also define a logical printer for the hardcopy function.

This feature enables a user to select a printer which is convenient (that is, a printer which is located near the user's terminal, or a printer into which a special form has been inserted).

When you invoke this function, you can specify the name of a user profile in a window.

```

Time 10:02:37          *** NATURAL SPOOL Administration ***          Date 1997-07-22
User  SAG              M e n u                                     SPMMEN01

      Administration      +----- User Profile(s) -----+
      10 Reports / Queues  ! Please enter                               !
      11 Devices           !           User Profile(s)                   !
      12 Abstracts        ! or                                             !
      13 Applications     ! *   for Selection                               !
      Maintenance        ! ?   for Help                                   !
      30 Layout of Spool File ! .   for End                                       !
      31 Objects          ! -----                                         !
      32 Mass Update      ! / _____ /                                   !
      33 Hardcopy Allocations ! -----                                         !

Enter values.
Command ==>
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help Menu Exit User Logic Alloc Print Heade Appli          NTCC Canc
    
```

When you specify the name of an existing user profile, it is displayed. Otherwise, a new user profile with this name may be added to the spool file.

You can also select the user profile from a list.

Selecting a User Profile from a List

To select a user profile from a list, enter one of the following:

- a partly-qualified name (e.g. CA* to list all user profiles starting alphabetically from CA),
- an asterisk (*) to list all user profiles in the NATSPOOL system.

A list of user profiles is then shown in a window.

```

Time 10:14:38          *** NATURAL SPOOL Administration ***          Date 1997-07-22
User  SAG              M e n u                                     SPMMEN01
                                     +-----Select with CA*-----+
Administration          ! New start value .....          !
! -----!
10 Reports / Queues    ! Fl Cm  Name          Fl Cm  Name          !
11 Devices             ! -- --  -----          -- --  -----          !
12 Abstracts          !      _  CAYIMS          _  CAYIMS01        !
13 Applications        !      _  CAYPRINT        _  CYTEST          !
!                      !      _  DWI010          _  GRE10           !
!                      !      _  HBNPROF         _  HHIUPF01        !
Maintenance           !      _  HUGO            _  NOM             !
!                      !      _  REC             _  RRI              !
30 Layout of Spool File !      _  RRICICS         _  SAG             !
31 Objects             !      _  SAGILQ          _  SAG00001        !
32 Mass Update         !      _  SET1            _  SET2            !
33 Hardcopy Allocations !      _  TMA             _  URANIMS         !
!                      !                      !
!                      !                      !
+-----+
Mark on selection list.
Command ==>
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help  Menu  Exit          --                               Canc
    
```

The user profile which was used for the initialization of the current Natural session is highlighted in the window.

In the Cm column, you can enter one of the following codes:

Code	Description
C	Copy user profile.
D	Delete user profile.
R	Rename user profile.
.	Exit function.
X or any other character	Display user profile for modification or deletion, see below.

Maintaining a User Profile

If the specified user profile exists, it is displayed. You can modify the list of allocated logical printers (LPFs) or delete the whole user profile.

Note:

If you specify a name that does not yet exist, you can add a new user profile. In this case, the Delete option is not provided in the window.

```

Time 10:09:47          *** NATURAL SPOOL Administration ***          Date 1997-07-22
User  SAG              M e n u                                     SPMMEN01
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
!   Modify              SET1              Delete (Y/N)          N   !
!   -----+-----+-----+-----+-----+-----+-----+-----+-----+
!   Owner (Y/N) N      Mark for selection of existing log. printers _ !
!   -----+-----+-----+-----+-----+-----+-----+-----+-----+
!   Mk. No. LPF Name Mk. No. LPF Name Mk. No. LPF Name Mk. No. LPF Name !
!   _  1  PROF3___ _  2  PROF2___ _  3  PROF1___ _  4  NOMPRT01 !
!   _  5  _____ _  6  _____ _  7  _____ _  8  _____ !
!   _  9  _____ _ 10  _____ _ 11  _____ _ 12  _____ !
!   _ 13  _____ _ 14  _____ _ 15  _____ _ 16  _____ !
!   _ 17  _____ _ 18  _____ _ 19  _____ _ 20  _____ !
!   _ 21  _____ _ 22  _____ _ 23  _____ _ 24  _____ !
!   _ 25  _____ _ 26  _____ _ 27  _____ _ 28  _____ !
!   _ 29  _____ _ 30  _____ _ 31  _____ _  HC  _____ !
!   -----+-----+-----+-----+-----+-----+-----+-----+-----+
!   Notes                                                     !
!   _____                                               !
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
Enter name or mark logical printer.
Command ==>
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10---PF11---PF12---
      Help Menu Exit User Logic Alloc Print Heade Appli      NTCC Canc

```

The window prompts for a list of names of logical printers to be associated with the user profile. Up to 31 logical printer names may be entered, since this is the maximum number of logical printers which can be specified in a single user profile.

If you mark the field for selection of existing logical printers, a list of all available logical printers is displayed, where the desired logical printers may be selected by number. The logical printer names are positional. If, for example, the first and third elements of the user profile are defined, only the statements WRITE (1) and WRITE (3) will be valid. The statement WRITE (2), however, would receive error message NAT1573 (logical printer not found on spool file).

In the HC field, you can define a logical printer for the hardcopy function.

Example:

The user profile UPFSTART contains the following entries:

1: LDR4711

2: LDR1805

3: LRZ

HC: LHCOP

The positions 4 to 31 are empty.

These definitions result in the following:

When WRITE (1) is executed, the logical printer LDR4711 is used. When WRITE (2) is executed, the logical printer LDR1805 is used. When WRITE (3) is executed, the logical printer LRZ is used. When %H is executed, the logical printer LHCOP is used.

The prerequisite, however, is that the PRINT parameter was dynamically defined, or that the NTPRINT macro was defined in the Natural parameter module for at least 3 printers:

```
NTPRINT (1-3),AM=NAF
```

If a value smaller than 3 was defined, the corresponding entries in the user profile are ignored.

Logical Printer - Function 31.2

A logical printer (LPF) defines the attributes that are to be applied to a report.

Using the DEFINE PRINTER statement, it is possible to modify the assignment - independent of the settings used during initialization or logon.

If you have modified the assignment using the DEFINE PRINTER statement (e.g. you have specified a new value for OUTPUT), the new assignment is not automatically reset at program end.

It is valid until a new assignment is made using the DEFINE PRINTER statement or until a new initialization (via logon) occurs (only when using Natural Security).

Print output can also be forwarded to other spool systems. This is controlled by a logical printer.

When you invoke this function, you can specify the name of a logical printer in a window.

```

Time 10:18:01          *** NATURAL SPOOL Administration ***          Date 1997-07-22
User  SAG                                M e n u                                SPMMEN01
                                +----- Logical Printer(s) -----+
Administration            !                                     !
                                ! Please enter                               ..!
10 Reports / Queues       !                                     !
11 Devices                 !      Logical Printer(s)                    !
12 Abstracts              ! or                                             !
13 Applications           ! *   for Selection                               !
                                ! ?   for Help                                   !
Maintenance               !                                     !
30 Layout of Spool File   !                                     !
31 Objects                 ! .   for End                                    !
32 Mass Update            ! -----                                         !
33 Hardcopy Allocations   ! / _____ /                                 !
                                !                                     !
                                +-----+
Enter values.
Command ==>
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help Menu Exit User Logic Alloc Print Heade Appli      NTCC Canc

```

When you specify the name of an existing logical printer, it is displayed. Otherwise, a new logical printer with this name may be added to the spool file.

You can also select the logical printer from a list.

Selecting a Logical Printer from a List

To select a logical printer from a list, enter one of the following:

- a partly-qualified name (e.g. D* to list all logical printers starting alphabetically from D),
- an asterisk (*) to list all logical printers in the NATSPOOL system.

A list of logical printers is then shown in a window.

```

Time 10:29:11          *** NATURAL SPOOL Administration ***          Date 1997-07-22
User  SAG              M e n u                                     SPMMEN01
                                     +-----Select with *-----+
Administration          ! New start value .....          !
! -----!
10 Reports / Queues    ! Fl Cm  Name          Fl Cm  Name          !
11 Devices             ! -- --  -----!
12 Abstracts          ! 5  _  ---0          5  _  ---0          !
13 Applications        ! 5  _  ---1          5  _  ---2          !
! 5  _  ---4          5  _  ---6          !
! 5  _  ---8          5  _  --23          !
Maintenance            !   _  #RRI           _  BPM-----!
!   _  BRU1           _  CMPRT08      !
30 Layout of Spool File ! 6  _  DAELC107       _  DAEN0526      !
31 Objects             !   _  DAEN0541       _  DAEPRT10      !
32 Mass Update         !   _  DAEPRT12       _  DAEPRT13      !
33 Hardcopy Allocations !   _  DAEPRT45       6  _  FRIPRT17    !
!   _  GRE10         1  _  H-----!
! 8  _  HHI-----   _  HHILPF      !
+-----+
Mark on selection list.
Command ==>
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
Help  Menu  Exit          --  +                               Canc
    
```

The logical printers which were used for the initialization of the current Natural session are highlighted in the window.

The Fl (flag) column indicates the usage of the logical printer. For the possible values in this column, see the online help.

Names containing a hyphen (-) are created for hardcopy allocation using a mask to build up the corresponding name. See the spool file options.

In the Cm column, you can enter one of the following codes:

Code	Description
C	Copy logical printer.
D	Delete logical printer.
R	Rename logical printer.
.	Exit function.
X or any other character	Display logical printer for modification or deletion, see below.

Maintaining a Logical Printer

If the specified logical printer exists, it is displayed. You can modify the individual parameters or delete the whole logical printer.

Note:

If you specify a name that does not yet exist, you can add a new logical printer. In this case, the Delete option is not provided in the window.

```

Time 10:45:51          *** NATURAL SPOOL Administration ***          Date 1997-07-22
User  SAG              M e n u                                     SPMMEN01
+----- Logical Printer(s) -----+
!   Modify              PROF1              Delete (Y/N)          N   !
! -----+----- !
!   Mark for selection of existing Allocations (Destination/Form)  _   !
!   Mark to show values for assigned Allocation                    _   !
! -----+----- !
!   Destination ..... DARMSTD_      Form .....          1   !
! -----+----- !
!   Duplicates ..... 0__            Disposition .....      K   !
!   Priority ..... 1__              Protected Reports .....  N   !
!   Retention period .. 1__ Days    for disposition      D H K L !
!   using calendar ... _____      Y Y Y Y          !
! -----+----- !
!   Type ..... NAF_____          linked to Cluster .....  --  !
!                                     Owner .....          N   !
!   Notes                                     !
! -----+----- !
Enter values for logical printer.
Command ==>
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10---PF11---PF12---
      Help  Menu  Exit  User  Logic Alloc Print Heade Appli      NTCC  Canc
    
```

If you mark the field for selection of existing allocations, a list of all available allocations is displayed, and you can mark the desired allocation.

You can also display the values of the assigned allocation. To do so, mark the corresponding field.

The above window prompts you for the following parameters used to define the logical printer:

Parameter	Description
Destination	The name (maximum 8 characters) of the logical destination which, with Form, identifies all reports generated using this logical printer.
Form	A character which, with Destination, identifies all reports generated using this logical printer.
Duplicates	A numeric value giving the number of copies of the report which are to be printed.
Disposition	An alphanumeric character which indicates the initial status of the report after it has been produced. Possible values are: D Keep the report on file in a printable status, that is, print it either when the physical printer is ready or upon an explicit request. After the report has been printed, it is deleted from the spool file. H Hold the report on file. To print the report, the user has to change the disposition to a valid value different from H, see Function 10. K Keep the report on file in a printable status, that is, print it either when the physical printer is ready, or upon an explicit request. After the report has been printed, the disposition is set to L.
Priority	A numeric value (0-255) giving the order in which the reports will be printed. A higher value means higher priority.
Protected Reports	Reports created for a logical printer with type NAF can be protected. Possible values are: R Only the user who created the report can display it. P Only the user who created the report can purge it. S Only the user who created the report can start it. G Only the user who created the report can display or start it. N No protection.
Retention period	The number of days that the report is to be held on the spool file. The value 9999 indicates unlimited retention. The retention period can be limited to certain types of disposition: in addition to the values D, H and K (see above), the value L (for printed reports with disposition K) is also supported.
using calendar	When using the retention period, you can also specify the name of a calendar to take into account weekends and holidays.
Type	NAF The report is for NAF and is stored on the NAF spool file. NOM The report is for Entire Output Management and is stored on the NOM container file. RSO The report is for RSO and is routed to RSO directly. EXIT4 A user-written exit which is linked to the front part of Natural under BS2000/OSD gets control for opening, writing and closing the report.
Notes	A short description of the logical printer.

The attributes Duplicates, Priority and Disposition can also be set dynamically using the DEFINE PRINTER statement.

Allocation Table - Function 31.3

Allocations must be defined so that a relation is established between the reports and the physical printers to which the reports can be routed. An allocation is identified by the parameters which were defined for the logical printer (destination and form).

When a report is generated, NATSPOOL uses the associated allocation to start the printing activity on the first physical printer with status FREE (the disposition value for that report must be either K or D). If the allocation is not found, or if none of the allocated physical printers is in FREE status, the report is kept on the spool file.

When you invoke this function, you can specify the names of a destination and form in a window.

```

Time 10:53:49          *** NATURAL SPOOL Administration ***          Date 1997-07-22
User  SAG                               M e n u                               SPMMEN01
                                     +----- Allocation Table -----+
Administration                                     !                                     !
                                     ! Please enter                                     !
10 Reports / Queues                                 !                                     !
11 Devices                                         ! Destination / Form.                       !
12 Abstracts                                       ! or                                         !
13 Applications                                    ! * for Selection                           !
Maintenance                                       ! ? for Help                                !
30 Layout of Spool File                           ! . for End                                 !
31 Objects                                         ! -----                                     !
32 Mass Update                                    ! / _____ / _                           !
33 Hardcopy Allocations                           !                                     !
                                     +-----+
Enter values.
Command ==>
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help Menu Exit User Logic Alloc Print Heade Appli          NTCC Canc

```

When you specify the name of an existing destination/form, the allocation is displayed. Otherwise, a new allocation with this name may be added to the spool file.

You can also select the allocation from a list.

Selecting an Allocation from a List

To select an allocation from a list, enter one of the following:

- a partly-qualified name (e.g. BS2* to list all allocations starting alphabetically from BS2),
- an asterisk (*) to list all allocations in the NATSPOOL system.

A list of allocations is then shown in a window.

```

Time 11:16:46          *** NATURAL SPOOL Administration ***          Date 1997-07-22
User  SAG              M e n u                                     SPMMEN01
                                +-----Select with *-----+
Administration              ! New start value .....          !
                                ! -----!
10 Reports / Queues         ! Fl Cm  Name          Fl Cm  Name          !
11 Devices                  ! -- --  -----          -- --  -----          !
12 Abstracts                !      _ BS2PID  H      _  CAYIMS  A          !
13 Applications             !      _ DAEPR10A     _  DAEPR10H     !
                                !      _ DAEPR12A     _  DAEPR13A     !
                                !      _ DAEPR45A     _  DARMSTD  A          !
Maintenance                 !      _ DARMSTD 1     _  DARMSTD 2          !
                                !      _ DARMSTD 3     _  DARMSTD 4          !
30 Layout of Spool File    !      _ DARMSTD 5     _  DARMSTD 8          !
31 Objects                  !      _ DDR1171  A     _  DDR1490  A          !
32 Mass Update              !      _ DHCDEST  H     _  DR1171   H          !
33 Hardcopy Allocations    !      _ HCDEST   H     _  HHI     A          !
                                !      _ HHIDEST  A     _  HHIPID  H          !
                                +-----+
Mark on selection list.
Command ==>
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help  Menu  Exit              --  +                               Canc
    
```

The allocations which were used for the initialization of the current Natural session are highlighted in the window.

In the Cm column, you can enter one of the following codes:

Code	Description
C	Copy allocation.
D	Delete allocation.
R	Rename allocation.
.	Exit function.
X or any other character	Display allocation for modification or deletion, see below.

Maintaining an Allocation

If the specified destination/form exists, the allocation is displayed. You can modify the list of allocated physical printers, specify a header page for the report or delete the whole allocation.

Note:

If you specify a name that does not yet exist, you can add a new allocation. In this case, the Delete option is not provided in the window.

```

Time 11:13:03          *** NATURAL SPOOL Administration ***          Date 1997-07-22
User  SAG              M e n u                                     SPMMEN01
+-----+-----+ Allocation Table -----+
!  Modify                DARMSTD A                Delete (Y/N)          N  !
! -----+-----+-----+-----+-----+-----+-----+-----+-----+
!  Owner..... N                linked to Cluster ... TESTCLUS  !
! -----+-----+-----+-----+-----+-----+-----+-----+-----+
!  Headerpage                _____                Queuestatus A  !
!  Statistics (Y/N) Y                Add/Modify Time values ..... N  !
! -----+-----+-----+-----+-----+-----+-----+-----+-----+
!  Physical Printer(s)                Printer selection _  !
! -----+-----+-----+-----+-----+-----+-----+-----+-----+
!      Name  Ty.      Name  Ty.      Name  Ty.      Name  Ty.  !
!  _  1 P007___ M   _  2 P002___ B   _  3 P003___ A   _  4 MK1___ B   !
!  _  5 MK2___ A   _  6 MK3___ B   _  7 MK4___ A   _  8 MK5___ B   !
!  _  9 MK6___ A   _ 10 MK7___ B   _ 11 MK8___ A   _ 12 MK9___ B   !
!  _ 13 MK10___ A  _ 14 MK11___ B   _ 15 MK12___ A   _ 16 MK13___ B   !
! -----+-----+-----+-----+-----+-----+-----+-----+-----+
!                               Notes -----+-----+-----+-----+
! -----+-----+-----+-----+-----+-----+-----+-----+-----+
Enter name of printer.
Command ==>
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
          Help  Menu  Exit                               Canc
    
```

Note:

Under BS2000/OSD, this window contains the additional field "Time window".

The window prompts for a list of up to 16 physical printers to which reports with the given destination and form can be routed. If you mark the field for printer selection, a list of all available physical printers is displayed, where the desired physical printer(s) may be marked by number. The number indicates the position in the list of physical printers in the above screen.

When you enter an asterisk (*) to the left of the printer name, the attributes for this printer are shown.

The first printer is the main printer (indicated by M in the type column). For this printer, the type cannot be modified.

When you define more than one physical printer, you have to define the type of printer. The following types can be defined for Printers 2 to 16:

Type	Usage
A	Alternate printer. Will be used if all other printers are already active or in INOP status.
B	Backup printer. Will only be used if all other printers are in INOP status.

In addition, you can specify the following:

- The name of a header page for the report to be printed or an asterisk (*) to select the header page from a list.
- The queue status. All reports for an allocation are called "queue". The queue status can be set to A (activated, all reports will be printed, if possible) or D (deactivated, all reports are collected on the spool file until the queue is activated). Under BS2000/OSD it is possible to define a monitor queue and set the queue status to M (reports are created on the spool file and printing is started using a monitor).
- Whether you require statistics (Y/N). When you specify Y, the number of pages, lines and reports for this allocation are collected and can be maintained using Function 20. When Y is specified, an additional field appears (Add/modify time values). When you specify Y for this additional field and press ENTER, the Time window appears in which you can restrict this function to a user-defined time range.
- Whether you want to add/modify a time window (Y/N). This feature applies only under BS2000/OSD. When you specify Y, printing of reports can also be started using a time window. An additional window appears in which you specify the desired time range for the start and end of printing. The prerequisite is that the Time function has been activated using Function 30.5.

When an allocation (between a logical and a physical printer) is added to the spool file by a user, NATSPOOL checks whether the corresponding physical printer is present on the spool file. If the printer is not present, it is added automatically. In other words, it is not necessary to execute Function 31.4

Printer - Function 31.4

One or more physical printers must be defined to NATSPOOL to indicate where reports are to be routed.

Besides general information, a physical printer describes technical data required to establish a connection. This information depends on the operating system: CICS, BS2000/OSD or IMS/DC.

When you invoke this function, you can specify the name of a physical printer in a window.

```

Time 15:02:17          *** NATURAL SPOOL Administration ***          Date 1997-07-23
User  SAG              M e n u                                     SPMMEN01
                                +----- Printer(s) -----+
Administration            !                                     !
                                ! Please enter                                     !
10 Reports / Queues       !                                     !
11 Devices                !      Printer(s)                                     !
12 Abstracts              !                                     !
13 Applications           ! or                                     !
                                ! *   for Selection                                     !
Maintenance              !                                     !
                                ! ?   for Help                                       !
30 Layout of Spool File  !                                     !
31 Objects                !      .   for End                                     !
32 Mass Update           !                                     !
33 Hardcopy Allocations  ! -----                                     !
                                ! / _____ /                                     !
                                +-----+
Enter values.
Command ==>
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help Menu Exit User Logic Alloc Print Heade Appli      NTCC Canc

```

When you specify the name of an existing physical printer, it is displayed. Otherwise, a new physical printer with this name may be added to the spool file.

You can also select the physical printer from a list.

Selecting a Physical Printer from a List

To select a physical printer from a list, enter one of the following:

- a partly-qualified name (e.g. D* to list all physical printers starting alphabetically from D),
- an asterisk (*) to list all physical printers in the NATSPOOL system.

A list of physical printers is then shown in a window.

```

Time 15:23:06          *** NATURAL SPOOL Administration ***          Date 1997-07-23
User SAG              M e n u                                     SPMMEN01
+-----Select with D*-----+
Administration      ! New start value .....          !
! -----!
10 Reports / Queues ! Fl Cm  Name          Fl Cm  Name          !
11 Devices          ! -- --  -----          -- --  -----          !
12 Abstracts        !      _  DAEPRTC A      _  DAEPR T10         !
13 Applications     !  S  _  DAEPR T12        _  DAEPR T13         !
!                  !      _  DAEPR T10        _  DAPERT13         !
!                  !      _  DEAPRTCA        S  _  DR1171         !
Maintenance         !  S  _  DR1490          _  HCTEST          !
!                  !      _  HHIPI D         _  HUGO           !
30 Layout of Spool File !      _  MK1           _  MK10           !
31 Objects          !      _  MK11          _  MK12           !
32 Mass Update      !      _  MK13          _  MK2            !
33 Hardcopy Allocations !      _  MK3           _  MK4            !
!                  !      _  MK5           _  MK6            !
!                  !      _  MK7           _  MK8            !
+-----+
Mark on selection list.
Command ==>
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help  Menu  Exit                --  +                                Canc
    
```

The physical printer which was used for the initialization of the current Natural session is highlighted in the window.

The Fl (flag) column indicates the following:

Flag	Description
P	Protected by administrator(s).
S	Physical printer is defined for usage by another operating/TP system.

In the Cm column, you can enter one of the following codes:

Code	Description
C	Copy physical printer.
D	Delete physical printer.
R	Rename physical printer.
.	Exit function.
X or any other character	Display physical printer for modification or deletion, see below.

Maintaining a Physical Printer

If the specified physical printer exists, it is displayed. You can modify the form feed parameters or delete the whole physical printer.

Note:

If you specify a name that does not yet exist, you can add a new physical printer. In this case, the Delete option is not provided in the window.

```

Time 15:16:47          *** NATURAL SPOOL Administration ***          Date 1997-07-23
User  SAG                      M e n u                      SPMMEN01
+-----+-----+-----+-----+-----+-----+-----+-----+
!  Modify                DAEPRT10                Delete (Y/N)          N  !
! -----+-----+-----+-----+-----+-----+-----+
! Owner ..... N          Privat Printer N          Cluster ....  --  !
! -----+-----+-----+-----+-----+-----+-----+
! Standard Profiles Y                                Opsys/Tpsys  CICS____ !
! Statistics ..... N                                     !
! -----+-----+-----+-----+-----+-----+-----+
! Check for form .. N          Initial form  _____ / _  !
! FF control ..... B          FF sequence  0D0C  LF sequence  0D15 !
! -----+-----+-----+-----+-----+-----+-----+
! Printer type .... _____ !
! -----+-----+-----+-----+-----+-----+-----+
! CICS SYS.ID ..... _____ !
! -----+-----+-----+-----+-----+-----+-----+
! Notes
! _____ !
+-----+-----+-----+-----+-----+-----+-----+
Please enter values for printer.
Command ==>
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12--
      Help Menu Exit User Logic Alloc Print Heade Appli          NTCC Canc

```

Note:

The layout of the above window changes depending on the operating system specified.

The physical printer name must correspond to one of the following, according to the operating system used:

- the CICS Terminal ID, as specified in the CICS Terminal Control Table TCT; or
- it must be an IMS/DC LTERM name; or
- the physical name (PDN) of a BS2000/OSD printer.

You can specify the following for all operating systems:

- Whether standard profiles are to be used (Y/N). When you add a physical printer, a logical printer and destination/form are automatically created. The names of the logical printer and destination correspond to the name of the physical printer. As a form name, A is provided. If you specify N, these objects are deleted.
- The operating system or TP monitor for which you define the printer. You can specify CICS, BS2000/OSD or IMS/DC.
- Whether you require statistics (Y/N). If you specify Y, the number of pages, lines and reports for this allocation are collected and can be maintained using Function 20. When Y is specified, an additional field appears (Add/modify time values). If you specify Y for this additional field and press ENTER, the Time window appears in which you can restrict this function to a user-defined time range.
- Whether the spool server is to check which form (destination/form) was printed on this physical device before (Y/N). If the form differs, printout is not started and a message is sent to the console. This check is not done under BS2000/OSD using system printers and for printers being accessed via a user exit.
- The initial form to be used if "Check for form" is set to Y. If you do not specify an initial form and this flag is set to Y, the first printout will be started and the destination/form of this report will then be used.
- When a form feed is to be performed. This information is only evaluated at print time (not when the report is stored on the spool file). Enter one of the following values:

Value	Description
A	Form feed at beginning and end.
B	Form feed at beginning only.
E	Form feed at end only.
N	No form feed at beginning and end.
T	Transparent (no modifications).

- Control sequences for the form feed and line feed.
- The type of printer if you work with printer-specific NTCC tables (see Function 31.8 and the DEFINE PRINTER statement).
- A description of the physical printer can be added in the Notes field.

All other fields in the screen depend on the currently used operating system. See below.

Maintaining a Physical Printer under CICS

```

Time 15:16:47          *** NATURAL SPOOL Administration ***          Date 1997-07-23
User  SAG                      M e n u                               SPMMEN01
+-----+-----+-----+-----+-----+-----+-----+-----+
!  Modify                DAEPR10                Delete (Y/N)          N  !
! -----+-----+-----+-----+-----+-----+-----+-----+
! Owner ..... N          Privat Printer N        Cluster ....  --  !
! -----+-----+-----+-----+-----+-----+-----+-----+
! Standard Profiles Y                                Opsys/Tpsys  CICS____  !
! Statistics ..... N                                     !
! -----+-----+-----+-----+-----+-----+-----+-----+
! Check for form .. N          Initial form  _____ / _      !
! FF control ..... B          FF sequence   0D0C   LF sequence  0D15  !
! -----+-----+-----+-----+-----+-----+-----+-----+
! Printer type .... _____ !
! -----+-----+-----+-----+-----+-----+-----+-----+
! CICS SYS.ID ..... _____ !
! -----+-----+-----+-----+-----+-----+-----+-----+
! Notes                                     !
! _____ !
+-----+-----+-----+-----+-----+-----+-----+-----+
Please enter values for printer.
Command ==>
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12--
      Help Menu Exit User Logic Alloc Print Heade Appli          NTCC Canc

```

A specific CICS system ID can be defined for each printer. If you do not specify a value, the value from the spool file options is used (see Function 30.5).

Maintaining a Physical Printer under IMS/DC

Report data are processed differently. Therefore, you must specify SCS printers by entering Y (yes) or N (no) in the field Printer Type. In addition, in the Buffer Size field, enter the size of the buffer used by the blocks transferred to the physical printer. The buffer size is defined in bytes and must be in the range of 256 and 4048.

BMP name and JCL member can be defined for each printer. If you do not specify any values, the values from the spool file options are used (see Function 30.5).

Maintaining a Physical Printer under BS2000/OSD

```

Time 11:59:18          *** NATURAL SPOOL Administration ***          Date 1997-08-25
User  SAG                      M e n u                      SPMMEN01
+-----+-----+-----+-----+-----+-----+-----+-----+
!  Modify                DR1171                Delete (Y/N)          N  !  !
!  -----+-----+-----+-----+-----+-----+-----+-----+
!  Owner ..... N  Privat Printer N                Ophys/Tpsys BS2000__  !  !
!  -----+-----+-----+-----+-----+-----+-----+-----+
!  Standard Profiles N  Statistics Y  Add/Modify Time values ..... N  !  !
!  Check form ..... N  Init. form _____ / _                !  !
!  FF control ..... N  FF sequence 0D25                LF sequence 0D25      !  !
!  -----+-----+-----+-----+-----+-----+-----+-----+
!  User EXIT _____ Printer Type 9001_____ RSO (Y/N) N  RSO Form _____  !  !
!  -----+-----+-----+-----+-----+-----+-----+-----+
!  Protocol type      NEAR  Processor      VR3_____ Trace (Y/N)  N  !  !
!  SEC. retry         20_  SEC. timeout   60_____ !  !
!  Max.no. restarts  10  Buffersize    1024 !  !
!  Connection type   B    Messageheader *STD_____ Cluster      TEST !  !
!  -----+-----+-----+-----+-----+-----+-----+-----+
!  Notes printer DR1171 on terminal ss1170_____ !  !
+-----+-----+-----+-----+-----+-----+-----+-----+
Please enter values for printer.
Command ===>
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help Menu Exit User Logic Alloc Print Heade Appli Clust NTCC Canc
    
```

You can specify the following:

- The name of a user exit. You can specify one of the following:

User Exit	Description
EXIT1	A user-written program gets control for each line of a report created for this physical printer. The control sequences for line feed and form feed are not modified. The program name for this type of exit is NAFEXIT1.
EXIT2	A user-written program gets control for each block before it is send to the physical printer using the YSEND macro. The program name for this type of exit is NAFEXIT2.
EXIT3	A user-written program gets control for all required functions (that is, open connection, start report, send data, close report, close connection). These functions must be executed by the user-written program. The program name for this type of exit is NAFEXIT3.
no specification	A user-written program will not be invoked.

- Whether the SNI spool system RSO is to be used (Y/N).
- An RSO form parameter for printers that are controlled using the SNI spool system RSO. If you do not specify a parameter, the destination value from the allocation is used. It is also possible to define a value in the NAF parameter module which ignores all other values.
- A protocol type (NEAR or ISO).
- The name of the processor which controls the printers.
- Whether the trace option is to be activated (Y/N) to get information about the DCAM and PRNT macros that are executed for this physical printer. When activated, trace messages (that is, the functions, their return codes, the name of the physical printer, date and time) are written to the protocol file SYSOUT.
- The number of seconds after which the system tries to reestablish the connection to a printer. After 3 unsuccessful attempts, this is canceled.
- The spool server expects an acknowledgement for each message sent to a printer. You can specify the period in

seconds after which a timeout is to occur.

- If the Restart option is active (see Function 30.5), you can specify the maximum number of restarts. When the maximum number is reached, the printer is deactivated for the spool server. Value 99 means that the number of restarts is unlimited. Value 0 means that there is no restart and that the printer will be set to FREE status.
- The buffer size, that is, the maximum size of a block that is sent to a printer. The maximum number is 4048 bytes.
- The connection types for physical printers that are accessed by DCAM calls. You can specify one of the following:

Value	Description
B	Should be used for devices defined as by-pass printers in the PDN definition. This is important for printers used as hardcopy devices.
N	Should be used for devices connected to directly to VR or to a MSF using the BAM protocol.
S	Should be used for devices connected to a MSN or an emulation.
P	Should be used to access a device or application (emulation) without modification to the data stream.

- The name of a message header. See also Function 31.A.

Example of Connection Type and Message Header:

The name of the message header is D9001 and the connection type is B. The spool server looks for a message header named D9001__B. If this message header is not defined, the spool server uses the standard message header for the corresponding connection type: *STD___N (BAM) or *STD___B (by-pass).

Standard values are used for by-pass and BAM connections only. When a printer is accessed via EXIT3 or is set to connection type P, the spool server searches for a correct message header. If a message header is not found, the data are processed without message header values.