

# Defining System Defaults

The System Defaults function enables the system administrator to set system-wide defaults.

This subsection covers the following topics:

- Defining System Default Parameters
  - System Defaults
  - Integrating Natural Applications
  - Monitor Defaults
  - Defining Container Files
  - Subtask Processing
  - Report Processing Defaults
  - Bundle Processing Defaults
  - Automatic Archiving Defaults
  - Defining Archiving Schedule Parameters
  - User-Defined Archives
  - Automatic Reviving Defaults
  - Automatic Cleanup Defaults
  - CMA-SPOOL Defaults
  - Natural Advanced Facilities Defaults
  - NOM API and User-Exit Defaults
  - SAP-Spool Defaults
  - UNIX Defaults
  - 3GL Interface
  - 3GL Interface Maintenance
- 

## Defining System Default Parameters

 **To define System Default parameters**

- Enter **1** in the command line of the System Administration Menu and press Enter.

The Default Definition Menu appears.

```

16:04:32          **** Entire Output Management ****          22/05/1999
User ID GHH          - Default Definition Menu -

1 System Defaults
2 Monitor defaults
3 Report Processing defaults
4 Bundle Processing defaults

5 Automatic archiving defaults
6 Automatic reviving defaults
7 Automatic cleanup Defaults

8 CMASPOOL Defaults
9 NATURAL ADVANCED FACILITIES Defaults
10 NOM API and User-Exit Defaults
11 SAP-Spool Defaults
12 3GL Interfaces

Please select option.
Command => _____
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help          Exit  Flip                                  Menu

```

- Select a function by typing its number in the command line and pressing Enter.

## System Defaults

- Special PF Keys
- Field Descriptions

### To define default parameters for Entire Output Management

- Enter **1** in the command line of the Default Definition Menu and press Enter.

The System Defaults screen appears.

```

18:32:08          **** ENTIRE OUTPUT MANAGEMENT ****          15/04/2003
UserId UKSJU          - System Defaults -

NOM Data File          NOM Active Data File
  DBID ..... 9_____          DBID ..... 9
  FNR ..... 243___          FNR ..... 243
Use Owner-ID ..... N
Date format ..... E
Support long names ..... Y
Automatic user definition... P

Daily Cleanup
  Time ..... _____
  Next run ..... 16/04/2003 00:01
Log
  Types ..... - - - - -
  Retention Period ..... 10D__
Printouts
  Types ..... - - -
  Retention Period ..... _____

Command => _____
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help      Exit  Flip  Do    Undo          Appl          Menu
    
```

## Special PF Keys

PF Key	Function	Explanation
PF9	Appl	Define applications which are implemented in the Entire Output Management Main Menu.

## Field Descriptions

### NOM Data File

Two out of the following three fields define the Entire Output Management Adabas file:

- **DBID**  
Adabas database ID of the Entire Output Management data file.
- **FNR**  
Adabas file number of the Entire Output Management data file.
- **Use Owner ID**  
Operating system resources should be accessed with the User ID of the Report Owner or Bundle Coordinator. This allows users whose ID is not externally defined (RACF, BS2000/OSD User ID ...) to use Entire Output Management.

N is equivalent to the version compatible with NOM 1.3. (The NOM user must have authorization to access operating system resources.)

Use Owner ID	User ID is ESY User	Browse	Submit Job
Y	Y	Report Owner	User ID
N	N	-	Monitor
Y	N	Report Owner	Report Owner
N	Y	User ID	User ID

- **Date Format**

The date format will be used for all date fields in the system, to test correctness at input and for display. Select one of the following date formats.

- **A/B** American (MM/DD/YYYY)
- **E/F** European (DD/MM/YYYY)
- **G/J** German (DD.MM.YYYY)
- **I/H** International (YYYY-MM-DD)

Formats B/F/J/H will display a 4-digit year even in 8-byte fields on screen.

- **Support long names**

Enter **Y** or **N**:

**Y** Entire Output Management supports long report and bundle names of 25 alphanumeric characters as a maximum.

**N** Long report and bundle names are not supported:

Report name consists of 17 alphanumeric characters as a maximum and bundle name of 8 alphanumeric characters as a maximum.

- **Automatic user definition**

This field can have 3 values:

**N** User IDs must be defined manually with the User Maintenance option. **N** is the default.

**P** When an online user enters an ID, which exists neither for a user nor a distribution list, the following dialog appears: \$This user ID is not defined Ć do you want it to be defined with default profile?Š. Possible options: **Y** (yes) or **N** (no).

**Y** When an online user enters an ID, which exists neither for a user nor a distribution list, NOM defines the user ID with a default profile, without prompting the user. The default profile will be taken from the user ID DEFAULT.

- **Daily Cleanup**

Once a day, cleanup processing is performed which:

- purges Active Reports or marks them for archiving
- purges expired Active Reports from Archive/Revival
- purges log records
- purges Printout Records
- purges Active Bundles

If you are running the monitor as a single task, it will be unable to process any reports, bundles or printouts while performing daily cleanup. To avoid this, you can define multiple tasks (daily cleanup is done by task 1) or execute the daily, report and spool cleanup as a stand-alone batch job. To achieve the latter, execute program NOMCLEAN in library SYSNOM in a standard batch Natural job, ensuring that LFILE 206 is correctly set to point to your NOM system file. You should schedule the batch job so that it finishes before the time specified for daily cleanup.

- **Time**

Enter the time you want to execute the cleanup process.

- **Next run**

Date/time of next cleanup run

## Log

### ○ **Types**

Enter the following letters for the types of information to be logged:

- **R** Report Maintenance information.
- **B** Bundle Maintenance information.
- **P** Logical Printer Maintenance information.
- **D** Distribution List Maintenance information.
- **L** Information about logon/logoff activity of Users.

### ● **Retention Period**

Enter the default Retention Period for log records, this is the period of time that log records are kept in the Entire Output Management database.

Enter a number followed by a letter:

- **D** = days
- **W** = weeks
- **M** = months

For example, 3D (3 days), 5M (5 months), etc.

## Printout

### ● **Types**

Enter the following letters to delete the Printout types automatically at the end of the Printout Retention Period.

- **D** Printed successfully
- **E** Printing error
- **F** Printing failed

### ● **Retention Period**

Enter the default Retention Period for Printouts. This is the period of time that Printouts are kept in the Entire Output Management database.

Enter an number followed by a letter, as above for Log Retention Period.

# Integrating Natural Applications

- Field Descriptions
- Automatic Display of other SAT Products

## **To integrate Natural applications in the Entire Output Management Main Menu**

- Press PF9 in the System Defaults screen.

The System Defaults > Applications screen appears.

```

10:32:00          **** Entire Output Management ****          11/11/1999
UserId GHH        - System Defaults>Applications -

Title                                     Library  StartPgm  Parameter
-----
Natural Advanced Facilities_____  SYSPool_ MENU_____
Entire System Server Tutorial_____  SYSNPE_  MENU_____
CON-NECT_____                        SYSCNT2_ MENU_____ DBA DBA_____
KIDICAP 2000_____                    KIDICAP_ MENU_____

Command => _____
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help           Exit  Flip  Do    Undo                               Menu

```

## Field Descriptions

- **Title**  
Enter a text which is displayed in the Main Menu.
- **Library**  
Enter a Natural library where the application is integrated.
- **StartPgm**  
Enter the name of the Natural program which is executed as start transaction.
- **Parameter**  
Enter the application-specific start parameters.

### Note:

Defined Applications are shown in the Main Menu of all users. If Natural Security is installed, a security check is performed and a message is displayed if the user is not allowed to log on to the Application. A RETURN-Point is set (using command SETUP).

To return to the Entire Output Management Main Menu, the Application must finish with RETURN.

## Automatic Display of other SAT Products

If other System Automation Tools products are installed at your site, they are automatically displayed in the same menu. If Natural Security is installed, a second check is performed and a message is displayed if the user is not allowed to logon to the Application.

In this way, it is easy to 'toggle' between:

- Entire Output Management and
- Entire Operations, Entire Event Management or Natural NSPF.

# Monitor Defaults

- POWER / JES2
- JES3
- BS2000/OSD

The Monitor runs as 1 or more subtask/s under Entire System Server or as 1 or more batch job/s and controls the generation, printing and distribution of Reports and Bundles.

 **To define default parameters for the Entire Output Management Monitor**

- Enter **2** in the command line of the Default Definition Menu and press Enter.

The Monitor Defaults screen appears.

## POWER / JES2

- Special PF Key Assignments
- Field Descriptions

```

17:58:10          **** ENTIRE OUTPUT MANAGEMENT ****          2002-11-08
UserId UKSJU          - Monitor Defaults -

Monitor Defaults
Node/System/Spool Type .. 40_ MVS/ESA  JES2          Error Handling
Batch Module ..... NATSAT31          Retries..... 5__
System Server Jobname ... NOMX040_    Interval.... 300__
Printer Tasks ..... 2_

Wait Factor          Long Records
Minimum ..... 30__          Container File DBID ..... 9__
Maximum ..... 60__          Container File FNR ..... 247__
Increment ..... 5__

Classes
Sysout ..... 8  - - - - -
Temporary ..... T
Print ..... X

Jobcards
/* TRACE=ON
_____
_____

Command => _____
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help      Exit Flip Do      Undo CopFi Tasks Archv          Menu
    
```

### Special PF Key Assignments

PF Key	Function	Explanation
PF7	CopFi	Define Container Files
PF8	Tasks	Define monitor subtask configuration.
PF9	Archv	Switch to defining Automatic Archive Defaults.

## Field Descriptions

### Monitor Defaults

- **Node**  
Enter the NPR (Entire System Server) Node number under which the Entire Output Management Monitor is run as a subtask or batch job.
- **System**  
System type (OS/390, VSE/ESA...)
- **Spool Type**  
Spool type (POWR, JES2, JES3)
- **Batch module**  
Enter the name of the Natural Batch Module to be used by the Monitor.  
The module must reside in the Entire System Server load library or in one of the Entire System Server STEPLIB libraries defined for the Natural task that is started.  
  
For information on creating the Batch Module, see the Section Installation and Customization in the Entire Output Management Installation and Customization Documentation.
- **System Server Job Name**  
Enter the name of the Entire System Server job.
- **Printer Tasks**  
Number of Tasks attached to Print Reports and Bundles in VTAM and Con-nect (max. 10).

### Error Handling

- **Retries**  
Enter the number of retries for a failed monitor operation. The action in error will not cause an error message, but it will be retried after the time specified in the "Interval" field.
- **Interval**  
Time in seconds after which a failed monitor operation is to be retried.

### Wait Factor

These parameters are used to adjust monitoring to the load in your installation. It is the time in seconds the Monitor waits between two consecutive monitoring cycles. During each cycle, the Monitor performs all the work accumulated since the end of the last cycle.

- **Minimum**  
Enter the **minimum** time in seconds the Monitor is to wait between two consecutive monitoring cycles.
- **Maximum**  
Enter the **maximum** time in seconds the Monitor is to wait between two consecutive monitoring cycles.
- **Increment**  
If there is no activity during the minimum wait time, the wait time is increased by the value you enter here, until the maximum is reached.  
When activity occurs, the wait time returns to the minimum.  
Enter the number of seconds by which the wait time should increase.

### Long Records

You can define reports as containing long records (for example AFP output). Data for these reports is copied by the monitor into an NOM container file, from which it can be archived or printed. For further information, see Long Records.

- **Container File DBID**  
Enter the database ID of the NOM container file to be used.
- **Container File FNR**

Enter the file number of the NOM container file to be used.

**Classes**

The following **three** fields are used to define the SYSOUT classes dedicated to Entire Output Management:

- **Sysout**  
Enter a list of SYSOUT classes to be processed by Entire Output Management. Only those jobs with SYSOUT data sets in these classes are processed.
- **Temporary**  
Define one SYSOUT class to hold temporary SYSOUT data sets.  
This class **must not** be one of the classes defined in the SYSOUT classes field, above.
- **Print**  
Enter the class in which Reports and Bundles are to be printed.

**Jobcards**

Enter a job card to be used as a default when no other job card is specified. The following substitution variable can be used:

§ USER

- **TRACE**  
If the text TRACE=ON appears anywhere in the jobcards, the monitor will write a detailed activity trace to its sysout file(s). This will degrade monitor performance. Thus, TRACE should only be used if necessary.

**JES3**

JES3 has an additional field - Execution - for Classes:

```

Classes
  Execution ..... _
  Sysout ..... 3  Temp ..... _
  Print ..... A
Jobcards
_____
_____
_____

Command => _____
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10---PF11---PF12---
      Help      Exit  Flip  Do    Undo  CopFi      Archv      Menu
    
```

- **Execution**  
Enter a list of execution classes to be processed by Entire Output Management.

**Note:**

This method creates considerable performance overhead and should only be used for reasons of compatibility. In future, only SYSOUT classes should be used for processing by Entire Output Management.

If, however, you still need this method during a transitional period: in addition to searching SYSOUT classes for output, execution classes can also be searched. In this case, the following limitations apply:

- performance overhead;
- no default definitions are checked for processing;
- messages that no Report definition has been found for a certain SYSOUT data set are not logged.

## BS2000/OSD

BS2000/OSD has two additional fields: Rename files and Virtual printer:

```

16:04:51          **** Entire Output Management ****          10/04/1999
UserId GHH              - Monitor Defaults -

Monitor Defaults
Node/System/Spool Type .. 112 BS2000/OSD   BS2000/OSD
Printer Tasks ..... 2_

Wait Factor
Minimum ..... 60__
Maximum ..... 300__
Increment ..... 5__

Rename files ..... Y
Virtual printer ..... *V_____ (recform)   DRGW1___ (space=e)
                   _____ (space=a)   _____ (space=i)

Jobcards
_____
_____
_____

Command => _____
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help      Exit  Flip  Do    Undo  CopFi   Archv      Menu
    
```

- Rename files**  
 Entire Output Management usually renames print files during processing by adding an internal ID to make them unique. Either enter **Y** (yes) to rename files or enter **N** (no) not to rename files.
- Virtual printer**  
 Enter the names of virtual printers (RSO) defined in BS2000/OSD. The Printouts for this device are processed by Entire Output Management. (The printers must be virtual and must not be enabled for the spooling system). If the type of carriage control is not contained in the RECFORM attribute, the printout must be routed to the printer assigned to the corresponding carriage control.

Starting with BS2000/OSD spool version 3.0 B, exactly one virtual printer (not RSO), which can be addressed with the PRINT-DOCUMENT command, can be assigned to a BS2000/OSD ID. In this case, enter \*V in the **recform** field and leave the rest empty.

**Warning:**

Rename=N and changing contents of input files will lead to inconsistent reports unless they are all kept in the data base. For this reason, reports resulting out of BS2000/OSD data sets with changing contents must always be created with 'Store in NOM DB = Y'; otherwise the source must be copied to a container file before processing.

## Defining Container Files

- Invoking the Copy to DB Files Window
- Column Headings

## Invoking the Copy to DB Files Window

**To define Container Files for the Entire Output Management Monitor**

- Press PF7 on the Monitor Defaults screen.

The Copy to DB Files window opens:

```

12:47:26          **** Entire Output Management ****          11/11/1999
UserId GHH          - Monitor Defaults -
+-----+
Mon !
!
!          - Copy to DB Files -
!
!  Destination      DBID  FNR  Destination      DBID  FNR  !
!  -----
Wai !  NOMFIL1_____  88_  52_  _____  _____  _____  !
!  NOMFIL2_____  88_  53_  _____  _____  _____  !
!  _____  _____  _____  _____  _____  _____  !
!
Cla !  _____  _____  _____  _____  _____  _____  !
!  _____  _____  _____  _____  _____  _____  !
!  _____  _____  _____  _____  _____  _____  !
!
Job !  _____  _____  _____  _____  _____  _____  !
!  _____  _____  _____  _____  _____  _____  !
!
!  PF3 = Exit
!
Com +-----+
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help      Exit  Flip  Do      Undo  CopFi      Archv      Menu
    
```

Container Files should be used, if separation processing is defined for the SYSOUT, and/or if SYSOUT is to be browsed online. Data is compressed in the specified files.

## Column Headings

- **Destination**  
Destination as specified in the DEST=(...) parameter of the \$LST (POWER) or of the DD statement (JES).
- **DBID/FNR**  
Database ID and file number of the Container File.

## Subtask Processing

**To define subtask processing for the Entire Output Management Monitor**

- Press PF8 on the Monitor Defaults screen.

The Monitor Task Profile screen appears:

```

12:10:34          **** ENTIRE OUTPUT MANAGEMENT ****          2000-07-24
UserId UKSJU          - Monitor Task Profile -

  Task   Scan      Copy      Create      Manage      Wait Factors
Number  Queues    Source    Reports    Printout    Min  Max  Increment

   1     -        -        -        -        30  120   10
   2     X        -        -        -        60__ 300_  30_
   3     -        X        -        -        120_ 3600  120
   4     -        -        X        -        30__ 180_  10_
   5     -        -        -        X        40__ 240_  20_

Command => _____
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help      Exit  Flip  Do   Undo                               Menu

```

Here you can split the workload of the monitor between up to 5 different tasks, each with their own wait factors.

The management functions of the monitor (for example, cleanup, active bundle flushing) are always done by Task 1. Task 1 will also take over work for any subtask that fails.

## Report Processing Defaults

- Defining Default Parameters for Report Processing
- Special PF Key Assignments
- Field Descriptions

The Report Processing defaults apply to newly-created Reports. They can be modified for each Report.

### Defining Default Parameters for Report Processing

#### To define default parameters for Report Processing

- Enter **3** in the command line of the Default Definition Menu and press Enter.

The Default Report Processing screen appears.

```

17:43:25          **** ENTIRE OUTPUT MANAGEMENT ****          2000-08-24
User ID UKSJU          - Report Processing Defaults -

Store in NOM DB ..... N
Archive directly ..... N
Create Definition .... -
Report Retention
  Number ..... 5__
  Unit ..... A
  Calendar ..... _____
  Action ..... P
Separator Pages
  Start ..... _____
  End ..... _____
  Copies ..... ____

Jobcards
  //NOMREPPR JOB CLASS=K,MSGCLASS=X_____
  _____
  _____

Command => _____
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help      Exit  Flip  Do      Undo      Edit      Menu
    
```

This screen enables you to enter values which are automatically written to the fields with the same names on the Report Definition screens.

For further information on Report Processing, see the Section Defining a Report in the Entire Output Management Reference Documentation.

### Special PF Key Assignments

PF Key	Function	Explanation
PF10	Edit	Edit separator pages. Place the cursor on the field Start or End to edit or modify the respective separator page.

### Field Descriptions

- Store in NOM DB**  
 Enter **Y** to take Report contents from the SPOOL and store them in the Entire Output Management Directory File for later viewing or archiving.
- Archive directly (Y/N/I)**  
 A Report can be archived from the data base or directly from the SPOOL.  
 Enter **Y** if you want to archive a Report automatically after creating it and when processing is completed. The contents of an Active Report are then no longer available online, when archived using **Y**.  
 Enter **N** if you do not want automatic archiving.  
 Enter **I** for immediate archiving.  
 For details, see Store in NOM DB | Archive directly - Y/N/I and Archive Processing in the Section Defining a Report of the Reference Documentation.

When an active report is archived using **I** for immediate archiving, the report remains online for viewing and its flag is set to **R** for Retain. When an active report reaches its expiry date, its contents will be purged and will no longer be available online unless the report is revived.

- **Create definition (Y/N)**

Enter Y to have definitions automatically created for reports produced as a result of separation.  
Enter N , if you do not want definitions to be created.

### Report Retention

The following three fields contain default parameters which determine how long Reports are stored in the Entire Output Management Database.

When the Retention Period expires, the Report can be archived or purged, according to the values you enter in the Action field, below.

The default is the system-wide period defined by the system administrator.

- **Number**

Enter the number of working days, absolute days, weeks or months the Report should be stored in the Entire Output Management Data Base. When you specify working days, you can enter the name of a Calendar in the Calendar field, below, to include only working days.

- **Unit**

**W** Working days  
**A** Absolute days  
**V** Weeks  
**M** Months

- **Calendar**

Enter the name of a Calendar here, if you specify **W** working days as the unit for the Retention Period. For example, if you enter **2** in the (Number) field and **W** in the Unit field, the Report is kept for two **working** days. If the Report is created on a Friday evening, then it is retained until Tuesday evening, because Saturday and Sunday are not (usually) working days.

- **Action**

When the Retention Period expires, the Report can be archived or purged.  
Enter **A** to archive the Report. Enter **P** to purge it.

**Note:**

If you do not specify a storage location (Entire Output Management or Con-nect) then the Report stays in the SPOOL.

### Separator

- **Start**

Enter the name of the separator member to be used for printing the Separator Page at the **beginning** of the Report.

If you leave this field blank, the standard separator is used.

- **End**

Enter the name of the separator member, to be used for printing the Separator Page at the **end** of the Report.  
If you leave this field blank, the standard separator is used.

- **Copies**

Enter the number of times the Separator Page is to be printed at the beginning and end of the Report.

- **Jobcards**

Enter the job cards to be used for printing with batch jobs.

The following substitution variables can be used:

- \$USER
- \$REPORT

## Bundle Processing Defaults

- Invoking the Bundle Processing Defaults
- Field Descriptions

The Bundle Processing defaults **apply to newly-created Bundles**. The values you enter here are automatically written to the fields with the same names on the Bundle Definition screen. They can be modified for each Bundle.

For further information, see the subsection Adding a Bundle Definition, in the Section Defining a Bundle in the Entire Output Management User’s Guide.

### Invoking the Bundle Processing Defaults

 **To define default parameters for Bundle Processing**

- Enter **4** in the command line of the Default Definition Menu and press Enter.

The Bundle Processing Defaults window opens.

```

13:57:03          **** Entire Output Management ****          11/11/1999
User ID GHH          - Default Definition Menu -
+-----+
!                                     - Bundle Processing Defaults -                                     !
!                                                                                                     !
! Retention Period .....  ___  Unit  _  Calendar _____                                     !
!                                                                                                     !
! Hold Before Print .....  _  (Y/N)                                                                                                     !
! Printer List .....  _____  _____  _____  _____                                     !
! Copies .....  _____  _____  _____  _____                                     !
!                                                                                                     !
! Separator Bundle .....  _____  (Start)  _____  (End)  ___  (Copies)  !
! Report .....  _  (Y/N)                                                                                                     !
!                                                                                                     !
! Print Job card                                                                                                     !
! _____                                                                                                     !
!                                                                                                     !
! PF1 Help PF3 Exit PF5 Do PF6 Undo PF12 Menu                                                                                                     !
!                                                                                                     !
+-----+
Please select option.
Command => 4_____
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help      Exit  Flip                                     Menu
    
```

### Field Descriptions

#### Retention Period

Number of absolute days, working days, weeks or months the Bundles are to be stored in the Entire Output Management Database. See the field descriptions for Retention Period of the Entire Output Management Reference Documentation. Make your entries accordingly.

- **Unit**
  - W** Working days
  - A** Absolute days
  - V** Weeks
  - M** Months

- **Calendar**

Enter the name of a Calendar here, if you specify **W** working days as the unit for the Retention Period.

For example, if you enter 2 in the (Number) field and **W** in the Unit field, the Report is kept for two **working** days. If the Report is created on a Friday evening, then it is retained until Tuesday evening, because Saturday and Sunday are not (usually) working days.

For more information, see the subsection Defining the Retention Period for a Bundle in the Section Defining a Bundle of the Entire Output Management User's Guide.

- **Hold Before Print (Y/N)**

Enter **Y** to place the Bundle in HOLD status in the Printout queue until released manually for printing. Enter **N** to print immediately.

### Printer

- **List**

You can enter up to 5 Logical Printer names. These are the printers on which the Bundle will be printed. To display a Printer Selection List, enter a question mark (?) and press Enter. A help window opens. Press Enter again to list the printers. For further information, see the subsection Selecting a Logical Printer for a Bundle in the Section Defining a Bundle of the Entire Output Management User's Guide.

- **Copies**

Enter the number of times the Bundle is to be printed on the respective printers.

### Separator Bundle

- **(Start)**

Enter the separator member name to be printed at the **beginning** of the Bundle.  
If this field is omitted, then the standard separator is used.

- **(End)**

Enter the separator member name to be printed at the **end** of the Bundle.  
If this field is omitted, then the standard separator is used.

- **(Copies)**

Enter the number of Separator Pages to be printed for the Bundle.

### Separator Report

- **(Y/N)**

**Y** is the default value and prints the Report Separator Page. Enter **N** not to print the Separator. The number of Separator Pages can be defined for each Report in the Bundle. See the subsection Adding a Report to a Bundle in the Section Defining a Bundle of the Entire Output Management User's Guide.

- **Print Job Card**

Enter the job card to be used for printing on system printers.

The following substitution variables can be used:

- %USER
- %BUNDLE

## Automatic Archiving Defaults

- Defining Default Parameters for Archiving
- Special PF Keys - Default
- Archiving Parameters Screen - VSE/ESA
- Special PF Keys - VSE/ESA
- Archiving Parameters Screen - BS2000/OSD
- Special PF Keys - BS2000/OSD
- Field Descriptions - OS/390, VSE/ESA, BS2000/OSD

- Field Descriptions - OS/390 only
- Field Descriptions - VSE/ESA only
- Field Descriptions - BS2000/OSD only

The Archiving Parameters function enables the system administrator to:

- create Archive data sets;
- schedule Automatic Archiving

For further information on Archiving, see the Section Archive Administration and the subsection Start Archiving Task.

## Defining Default Parameters for Archiving

### ▶ To define default parameters for Archiving

- Enter **5** in the command line of the Default Definition Menu and press Enter.

The Archiving Parameters screen appears.

```

13:01:43          **** ENTIRE OUTPUT MANAGEMENT ****          2003-03-18
User ID BRY          - Archiving Parameters -

Default Retention
  Number ..... 20__          Time scheduled ..... Y
  Unit ..... D          Next run ..... 2003-03-19 09:00
Skeleton ..... JARCSKEL
Data set prefix
  Archive ..... NOM.ARC221_____
  Condense ..... NOM.COND221_____ EXPDT .... _
Generic name ..... 3380_____
Storage class (SMS) ... _____
Archive to disk
  GDG ..... N          Max. generations ...
  Predefined VOLSERS.. USRF08 USRF09 USR005 USR006 _____
Condense Threshold .... _____ Delete Empty ... _
Jobcards
  //NOMARC22 JOB NOM,CLASS=K,MSGCLASS=X_____
_____
_____

Command => _____
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help      Exit  Flip  Do      Undo      Sched UsArc Edit      Menu
    
```

## Special PF Keys - Default

PF Key	Function	Explanation
PF8	Sched	Define Schedule
PF9	UsArc	Define User Archiving
PF10	Edit	Edit Job Skeleton

## Archiving Parameters Screen - VSE/ESA

```

10:52:51          **** ENTIRE OUTPUT MANAGEMENT ****          18/02/2003

User ID BRY              - Archiving Parameters -

Schedule
  Time scheduled ..... N
  Next run .....

Default Retention
  Number ..... 10
  Unit ..... D

Skeleton ..... JARCSKEL
Data Set Prefix
  Archive ..... NOM.ARC
  Condense ..... NOM.CDN
SYS(nnn) ..... 1
Condense Threshold .... _____ Delete Empty ... _
Jobcards
  * $$ JOB JNM=NOMARC, CLASS=0,DISP=H,LDEST=*,SYSID=_____
  * $$ LST CLASS=Y,DISP=H
  _____
Command => _____
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help      Exit  Flip  Do      Undo      Sched      Edit      Menu
    
```

## Special PF Keys - VSE/ESA

PF Key	Function	Explanation
PF8	Sched	Define Schedule
PF10	Edit	Edit Job Skeleton

## Archiving Parameters Screen - BS2000/OSD

```

10:52:51          **** ENTIRE OUTPUT MANAGEMENT ****          18/02/2003
User ID BRY              - Archiving Parameters -

Schedule
  Time scheduled ..... N
  Next run .....

Default Retention
  Number ..... 1____
  Unit ..... D

Skeleton ..... JARCSKEL
Data Set Prefix
  Archive ..... NOM.B.ARC_____
  Condense ..... NOM.B.CDN_____

Device ..... T-C1_____
Condense Threshold .... _____ Delete Empty ... _
Jobcards
  /.NOMARC LOGON_____
_____
_____

Command => _____
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help      Exit  Flip  Do    Undo      Sched      Edit      Menu
    
```

### Special PF Keys - BS2000/OSD

PF Key	Function	Explanation
PF8	Sched	Define Schedule
PF10	Edit	Edit Job Skeleton

### Field Descriptions - OS/390, VSE/ESA, BS2000/OSD

The fields described in this subsection are common to all operating systems.

#### Default Retention

The parameters entered in the following two fields determine where the Archive data sets are to be created, their prefix and how long they are to be retained.

Enter the default Retention Period for archive records. This is the period of time that Reports are kept in the Entire Output Management Database. When this period expires, the Reports are marked for deletion in the archive catalog.

- **Number**  
Enter the number of units the Reports are to be kept.
- **Unit**
  - **D** = days
  - **W** = weeks
  - **M** = months
  - **Y** = years

For example 3D (3days), 5M (5 months) etc.

### Schedule

The following two fields define automatic scheduling of the archiving process.

- **Time scheduled**  
Enter **Y** to activate the automatic time schedule, which you define below.
- **Next run**  
Date and time for which the next archive run is scheduled.

#### Note:

The scheduling process can also be started manually by entering the option code >8.7 in the command line of any screen and pressing Enter.

- **Skeleton**  
Enter the name of the job skeleton to be used for the Archive task. You can edit this member by pressing PF10 (Edit). The job skeleton with this name can be found in the SYSNOMU library. The job skeleton used for condensing has to be saved in library SYSNOMU and must be named 'JCDNSKEL'.
- **Data Set Prefix**
  - **Archive**  
Enter a prefix to be used for creating Archive data set names. A sequential number is added automatically to this prefix to create a name for an Archive data set. In BS2000/OSD environments, archive dataset prefixes will be automatically preceded by user ID '\$TSOS.'. For example, if the prefix is L99020, the data set name is L99020.NOM0001.
  - **Condense**  
You may enter a different prefix for archive datasets created by the condense job, so that these can be distinguished from normal archive datasets.
  - **EXPDT**  
Enter **N** (or leave blank) to provide an expiry date (or output file retention period) only on the final condense step. This is the default and is compatible with earlier versions of NOM.  
Enter **Y** to provide the expiry date on every condense step.  
**Note:**  
Entering **Y** here will cause operating system messages to be issued for the second and subsequent steps and these might require operator intervention.
- **Condense Threshold**  
Number of active reports in an archive that will cause automatic condense marking of this archive.
- **Delete empty**  
Automatic deletion of empty archive datasets. Enter **Y** or **N**.
- **Jobcards**  
Enter the job cards to be used for archiving with a batch job.

## Field Descriptions - OS/390 only

- **Generic Name**  
Enter the generic name for tapes used in your installation.  
This parameter is used for archiving to tapes.  
The default is TAPE (UNIT=TAPE in JCL).
- **Storage Class (SMS)**  
Enter the name of the storage class for the storage management system.

### Archive to disk

- **GDG**  
Enter **Y** to use a generation data set.

A **generation data set** is one of a series of data sets known as a generation data group. A generation data group is a collection of successive, historically related, cataloged generation data sets.

A generation data set is sometimes called a **generation**.

"To create or retrieve a generation data set, identify the generation data group name in the DSNAME parameter and follow the group name with a relative generation number. When creating a generation data set, the relative generation number tells the system whether this is the first data set being added during the job, the second, the third, etc. When retrieving a generation data set, the relative generation number tells the system how many data sets have been added to the group since this data set was added." (IBM OS/VS2 OS/390 JCL Documentation, p.105)

- **Max. generations**  
Maximum generations. This field is taken from the definition of the generation data set and cannot be modified.
- **Predefined VOLSERS**  
Enter up to 5 volsers to be used for archiving.

### Field Descriptions - VSE/ESA only

- **SYS(nnn)**  
Enter a number to specify the VSE/ESA system file to be used for archiving.

### Field Descriptions - BS2000/OSD only

- **Device**  
The medium to which archiving is performed (tape, cassette, e.g. T9P, T9G, T-C1 ...).

## Defining Archiving Schedule Parameters

- Field Descriptions

### To define Archiving Schedule Parameters

- Press PF8 (Sched) on the Archiving Parameters screen.

The Archiving Parameters/Schedule screen appears:

```

06:15:37          **** Entire Output Management ****          12/11/1999
User ID GHH          - Archiving Parameters/Schedule -

Next run ..... 12.11.1999 13:00

Start Time ..... 13:00

Weekdays ..... MO TU WE TH FR __ __          (Su Mo Tu We Th Fr Sa)
Or Monthly Days ..... __ __ __ __ __ __
                __ __ __ __ __ __
                __ __ __ __ __ __
                __ __ __ __ __ __

Calendar ..... _____
Before/After Holiday . _

Command => _____
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help      Exit  Flip  Do    Undo                                  Menu
    
```

## Field Descriptions

- Next run**  
 Date and time for which the next archive run is scheduled. This field is write-protected. The values are calculated automatically if the parameter in the Time scheduled field is set to **Y**.
  - Start Time**  
 If archiving is to be performed automatically according to a schedule, enter the time at which the archiving should start. The default is 24:00, midnight. The format is HH:II (hours:minutes), for example: 18:00.
- The archiving process can be scheduled for days in the week or days in the month. Enter data **either** for Weekdays **or** for Monthly days, **not for both**.

- Weekdays**  
 Enter the two-character abbreviation for the day or days in the week on which to perform archiving:

Command	Meaning
SU	(Sunday)
MO	(Monday)
TU	(Tuesday)
WE	(Wednesday)
TH	(Thursday)
FR	(Friday)
SA	(Saturday)

- Or Monthly Days**  
 Enter the dates in the month on which to perform archiving, for example: 01, 05, 23, etc. Or enter ALL for all days in the month or LD for the last day of the month.
- Calendar**  
 If you specify a Calendar here, archiving is performed only on days defined as **workdays** in the Calendar.

Archiving is not performed on days defined as **holidays**. To select a Calendar from a list of defined Calendars, enter an asterisk \* as wildcard here and press Enter. The Calendar Selection List window opens.

This window lists the names of all defined Calendars. Select a Calendar by entering any character in the field preceding it and pressing Enter. The name of the Calendar selected is written to the Calendar field.

- **Before/After Holiday(s)**

Should an archiving date fall on a Calendar holiday, enter **A** to archive on the first workday **after** the holiday, enter **B** to archive on the last workday **before** the holiday.

## User-Defined Archives

- Special PF-Keys
- Available Line Commands
- Column Headings
- Adding a User-Defined Archive
- Defining Keywords for JCL Substitution
- Displaying a User-Defined Archive
- Modifying a User-Defined Archive
- Deleting a User-Defined Archive
- Renaming a User-Defined Archive
- Displaying Cross-reference Information for a User-Defined Archive

You can define up to 9 custom archive types in addition to the standard archive. This enables you to:

- create **multiple hierarchies** for archived reports. For example, reports which need to be revived quickly can be archived to disk, with all other reports being archived to tape.
- archive to **non-standard datasets** (that is, datasets which cannot be accessed as a Natural work file) such as optical disks.

The NOM monitor submits an archive job for each type, which has active reports to be archived. It also submits a condense job for each type, which has archive datasets to be condensed. It submits a revive job for each dataset/volume containing reports to be revived.

### Notes:

- You cannot condense datasets of different types into a single output dataset.
- User-defined archives, which use a userexit, are assigned a logical volser of NOMUDA.

### To access user-defined archiving:

- Press PF9 (UsArc) on the Archiving Parameters screen.

The User Defined Archive Maintenance screen appears:

```

13:55:35          **** ENTIRE OUTPUT MANAGEMENT ****          2003-03-18
User ID BRY      - User Defined Archive Maintenance -

Cmd  Num  Name      Description
----  ---  -
  1  ARCTEST1  User defined archive test - not currently used
  2  ARCTEST2  User defined archive test - not currently used
  3  ARCTEST3  User defined archive to special SMS pool
  4  ARCTEST4  User defined archive using exit routines

All
Command =>
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help  Add  Exit  Flip          -      +                      Menu
    
```

### Special PF-Keys: User-Defined Archive Maintenance

PF Key	Function	Explanation
PF2	Add	Add new archiving type

### Available Line Commands: User-Defined Archive Maintenance

Command	Explanation
DI	Display a user-defined archive.
DE	Delete a user-defined archive.
MO	Modify a user-defined archive. (Not allowed if there are any reports, active reports or archive datasets of this type)
RN	Rename a user-defined archive.
XR	Display cross-reference information for objects which use this archive type.

### Column Headings: User-Defined Archive Maintenance

- **Cmd**  
Enter one of the above line commands.
- **Num**  
Internally allocated type number.
- **Name**  
User-specified name (must be unique).
- **Description**  
User-specified description for documentation purposes only.

## Adding a User-Defined Archive

- Special PF Keys
- Field Descriptions

 **To add a user-defined archive:**

- Press PF2 (Add) on the User Defined Archive Maintenance screen:

The User Defined Archive Type screen appears:

```

14:25:48          **** ENTIRE OUTPUT MANAGEMENT ****          2003-03-18
User ID BRY          - User Defined Archive Type -

Name ..... ARCTYP5_   Number: 5
Description .....
DSN Prefix .....
Job Skeletons
  Archive .....      Revive : _____ Condense: _____
Default Retention      User Routine
  Number .....      Library: _____
  Unit .....        Member : _____
Archive Jobcards
_____
_____
_____

Revive Jobcards
_____
_____
_____

Command => _____
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help      Exit Flip Do      Undo      Attrb Edit      Menu
    
```

### Special PF-Keys: User-Defined Archive Type

PF Key	Function	Explanation
PF9	Attrb	Define keywords for JCL substitution.
PF10	Edit	Edit skeletons and user routines. Cursor must be on object to edit it.

### Field Descriptions: User-Defined Archive Type

- **Name**  
Enter an archive name (must be unique).
- **Number**  
Internally allocated type number.
- **Description**  
Enter a description.
- **DSN Prefix** (optional)  
Prefix used for datasets created for this archive type. If you leave this blank, the value is taken from Automatic Archiving Defaults.
- **Job Skeletons** (required)  
Name of member in SYSNOMU to be used for submitting archive, revive and condense jobs.
- **Default Retention** (optional)

Archive retention value to be used for any report which doesn't have its own retention value. If you leave this blank, the value is taken from Automatic Archiving Defaults.

- **User Routine** (optional)  
User routine library and member to be invoked for this archive type. If you leave this blank, the archive will be handled as a standard batch Natural work file.
- **Archive/Revive Jobcards** (optional)  
Jobcards to be used for archive/condense and revive jobs. If you leave this blank, they are taken from Automatic Archiving and Reviving Defaults.

## Defining Keywords for JCL Substitution

- Special PF Keys: JCL Keywords

Whenever any of the keywords you define here (prefixed with &) appears in one of the job skeletons, it is replaced by its value.

There are certain NOM reserved keywords. If you attempt to add a keyword with a reserved name an error message is returned. It is the user's responsibility to ensure that value substitution does not result in invalid JCL (for example, truncation).

### To define keywords for JCL substitution:

- Press PF9 (Attrb) on the User Defined Archive Type screen.

The following screen appears:

```

19:47:54          **** ENTIRE OUTPUT MANAGEMENT ****          2002-08-13
User ID UKSJU          - User Defined Archive Type -

Job Skeleton Variables

Keyword      Value
NOM4A001__  ARCHIVE TYPE 4 KEYWORD 001_____
NOM4A002__  ARCHIVE TYPE 4 KEYWORD 002_____
NOM4A003__  ARCHIVE TYPE 4 KEYWORD 003_____
NOM4A004__  ARCHIVE TYPE 4 KEYWORD 004_____
NOM4A005__  ARCHIVE TYPE 4 KEYWORD 005_____
NOM4A006__  ARCHIVE TYPE 4 KEYWORD 006_____
NOM4A007__  ARCHIVE TYPE 4 KEYWORD 007_____
NOM4A008__  ARCHIVE TYPE 4 KEYWORD 008_____
NOM4A009__  ARCHIVE TYPE 4 KEYWORD 009_____
NOM4A010__  ARCHIVE TYPE 4 KEYWORD 010_____
_____
_____
_____
_____
Top Of Data
Command => _____
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help           Exit Flip Do      Undo - + Ident           Menu
    
```

You can enter up to 28 keywords.

### Special PF Keys: JCL Keywords

PF Key	Function	Explanation
PF3	Exit	Return to User Defined Archive Maintenance screen.
PF9	Ident	Return to User Defined Archive Type screen.

## Displaying a User-Defined Archive

### To Display a user-defined archive:

- On the User Defined Archive Maintenance screen, enter DI in the two-character command line preceding the archive type you want to display and press Enter.

The User Defined Archive Type screen appears for the selected archive. You can only view, not modify the displayed parameters.

## Modifying a User-Defined Archive

### To modify a user-defined archive:

- On the User Defined Archive Maintenance screen, enter MO in the two-character command line preceding the archive type you want to modify and press Enter.

The User Defined Archive Type screen appears for the selected archive.

- You can modify the data displayed by simply entering new data in the input fields. When you have finished modifying the archive type, press Enter to save your modifications.

A message confirms that the archive type has been successfully modified.

## Deleting a User-Defined Archive

### To delete a user-defined archive:

- On the User Defined Archive Maintenance screen, enter DE in the two-character command line preceding the archive type you want to delete and press Enter.

If CONFIRM is set to ON, a window opens which asks you to confirm deletion by typing the name of the archive type again.

- Type the archive name in the input field provided and press Enter.

A message confirms deletion.

## Renaming a User-Defined Archive

### To rename a user-defined archive:

- On the User Defined Archive Maintenance screen, enter RN in the two-character command line preceding the archive type you want to rename and press Enter.

The Rename Archive window opens.

- Type the new archive name in the input field provided and press Enter.

## Displaying Cross-reference Information for a User-Defined Archive

▶ To display cross-reference information for a user-defined archive:

- On the User Defined Archive Maintenance screen, enter XR in the two-character command line preceding the archive type for which you want to display information and press Enter.

The XREF of Archive Type window opens:

```

19:33:02          **** ENTIRE OUTPUT MANAGEMENT ****          2002-08-13
User ID UKSJU      - User Defined Archive Maintenance -
-----+-----+
Cmd  !              - XREF of Archive Type -              !
---- !              ARCTEST4                              !
---- !                                                    ! tly used
---- ! M Relation Type                Number              ! tly used
---- ! - _____- _____- ! ol
xr  ! _ Report                        1                 ! es
---- ! _ Active Report                    54              !
---- ! _ Archive Dataset                    5              !
---- !                                                    !
---- !                                                    !
---- !                                                    !
!                                                    !
! PF3 = Exit                                             !
-----+-----+

All
Command => _____
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help  Add  Exit  Flip                -      +                          Menu
    
```

This window shows how many objects of each type reference this archive.

- Mark the relation type with any non-blank character and press Enter to display the object list:

```

19:33:02          **** ENTIRE OUTPUT MANAGEMENT ****          2002-08-13
User ID UKSJU      - U +-----+
+-----+ !                - XREF of Archive Type -                !
Cmd  !                - !                ARCTEST4                !
----- !                !                !                !
----- !                !                UKSJU-ARCTYPE-04/30921        !
----- ! M Relation Ty !                UKSJU-ARCTYPE-04/30922        !
----- ! _          !                UKSJU-ARCTYPE-04/30924        !
xr    ! _ Report   !                UKSJU-ARCTYPE-04/30925        !
----- ! x Active Repo !                UKSJU-ARCTYPE-04/30926        !
----- ! _ Archive Dat !                UKSJU-ARCTYPE-04/30984        !
----- !                !                UKSJU-ARCTYPE-04/30985        !
----- !                !                UKSJU-ARCTYPE-04/30986        !
----- !                !                UKSJU-ARCTYPE-04/30988        !
----- !                !                UKSJU-ARCTYPE-04/30989        !
----- !                !                UKSJU-ARCTYPE-04/30990        !
----- !                !                UKSJU-ARCTYPE-04/30991        !
----- ! PF3 = Exit    !                UKSJU-ARCTYPE-04/30992        !
+-----+ !                !                UKSJU-ARCTYPE-04/30994        !
----- !                !                UKSJU-ARCTYPE-04/30995        !
All      !                !                !                !
Command =&gt; _____ ! PF3 = Exit                                !
Enter-PF1---PF2---PF3--- +-----+
Help Add Exit Flip          -      +                                Menu
    
```

## Automatic Reviving Defaults

- Defining Default Parameters for Reviving
- Special PF Keys
- Field Descriptions

The Reviving Parameters function enables the system administrator to schedule Automatic Reviving.

For further information, see the subsection Start Reviving Task.

### Defining Default Parameters for Reviving

 **To define default parameters for Reviving**

- Enter **6** in the command line of the Default Definition Menu and press Enter.

The Reviving Parameters screen appears.

```

06:58:32          **** Entire Output Management ****          12/11/1999
User ID GHH              - Reviving Parameters -

Skeleton ..... JREVSHEL
Schedule
  Time scheduled ..... Y
  Next run ..... 12.11.1999 07:00
  not before ..... 07:00
  every ..... 06:00
  not later ..... 19:00
  Weekdays ..... MO TU WE TH FR __ __ (Su Mo Tu We Th Fr Sa)
  Or Monthly Days ..... _____
                               _____
                               _____

  Calendar ID ..... _____
  Before/After Holiday . _

Jobcards
  * $$ JOB JNM=NOMREV,CLASS=0,DISP=H,LDEST=*,SYSID=_____
  * $$ LST CLASS=Y,DISP=H_____

Command => _____
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help      Exit  Flip  Do    Undo          Edit      Menu
    
```

## Special PF Keys

PF Key	Function	Explanation
PF10	Edit	Edit Job Skeleton

## Field Descriptions

- Skeleton**  
 Name of the Job Skeleton. Member resides in library SYSNOMU.
- Schedule**  
 The following fields are used to define the automatic scheduling of the Reviving process.
- Time scheduled**  
 Enter **Y** to activate the automatic time schedule, which you define below.
- Next run**  
 Date and time for which the next revive run is scheduled. The values in this field are calculated from the parameters entered below and are not modifiable here.
- not before**  
 Enter the time for the first reviving of the day to be performed. For example, 7:00.
- every**  
 Enter a time interval here. For example, if you enter **6** here, reviving is performed at 7:00, 13.00, and 19.00.
- not later**  
 Enter the time for the last reviving of the day to be performed. For example, **19.00**.
- Weekdays**  
 Enter the two-character abbreviation for the day or days in the week on which to perform reviving. See the field Weekdays for an explanation of the two-character abbreviations.
- Or Monthly Days**  
 Enter the dates in the month on which to perform reviving, for example: 01, 05, 23, etc. Or enter ALL for all days in the month or LD for the last day of the month.

- **Calendar ID**

If you specify a Calendar here, reviving is performed only on days defined as **workdays** in the Calendar. Reviving is not performed on days defined as **holidays**. To select a Calendar from a list of defined Calendars, enter an asterisk \* as wildcard here and press Enter. The Calendar Selection List window opens.

This window lists the names of all defined Calendars. Select a Calendar by entering any character in the field preceding it and pressing Enter. The name of the Calendar selected is written to the Calendar field.

- **Before/After Holiday**

Should an reviving date fall on a Calendar holiday, enter **A** to revive on the first workday **after** the holiday, enter **B** to revive on the last workday **before** the holiday.

- **Jobcards**

Enter the job cards to be used for reviving.

## Automatic Cleanup Defaults

- Defining Cleanup Parameters
- Field Descriptions

The Cleanup Parameters function enables the system administrator to schedule Automatic Cleanup.

### Defining Cleanup Parameters

 **To define default parameters for Cleanup**

- Enter **7** in the command line of the Default Definition Menu and press Enter.

The Cleanup Parameters screen appears.

```

18:01:02          **** ENTIRE OUTPUT MANAGEMENT ****          2002-11-08
User ID UKSJU          - Cleanup Parameters -

Spool Cleanup .... Y      Long records ..... _
Report Cleanup ... Y

Cleanup Schedule
Time scheduled . Y
not before ..... 07:00
    every ..... 01:01
not later ..... 23:00

Weekdays ..... _ _ _ _ _ _ _ _ _ _ (Su Mo Tu We Th Fr Sa)
Or Monthly Days ALL _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _

Calendar-Id .... _ _ _ _ _ Before/After Holiday(s) .. _

Scheduled next ... 2002-11-08 18:11

Command => _____
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help          Exit  Flip  Do      Undo                                Menu
    
```

## Field Descriptions

The following fields are used to define the automatic scheduling of the Cleanup process.

### Cleanup Process

- **Spool Cleanup**  
Enter **Y** to activate automatic SPOOL cleanup. This automatically deletes SPOOL files and Container File entries no longer needed by Entire Output Management
- **Report Cleanup**  
Enter **Y** to activate automatic Report cleanup. This automatically deletes Active Reports with location SPOOL, if corresponding SPOOL file no longer exists because it was deleted outside Entire Output Management.
- **Long Records**  
This field appears only if a long record container file is defined. Enter **Y** to activate NOM SPOOL cleanup for SPOOL files for reports defined as containing long records. "Spool Cleanup" must also be set to **Y**.

### Cleanup Schedule

- **Time scheduled**  
Enter **Y** to activate the automatic time schedule, which you define below.
- **not before** Enter time to perform the first cleanup of the day. For example, 7:00.
- **every**  
Enter a time interval here. For example, if you enter **6** here, cleanup is performed at 7:00, 13.00, and 19.00.
- **not later**  
Enter time to perform the last cleanup of the day. For example, 19.00.
- **Weekdays**  
Enter the two-character abbreviation for the day or days in the week on which to perform cleanup. See the field Weekdays for an explanation of the two-character abbreviations.
- **Or Monthly Days**  
Enter the dates in the month on which to perform cleanup, for example: 01, 05, 23, etc. Or enter ALL for all days in the month or LD for the last day of the month.
- **Calendar ID**  
If you specify a Calendar here, cleanup is performed only on days defined as **workdays** in the Calendar. Cleanup is not performed on days defined as **holidays**. To select a Calendar from a list of defined Calendars, enter an asterisk \* as wildcard here and press Enter. The Calendar Selection List window opens.

 **This window lists the names of all defined Calendars.**

- Select a Calendar by entering any character in the field preceding it and pressing Enter.  
  
The name of the Calendar selected is written to the Calendar field.
- **Before/After Holiday(s)**  
Should an cleanup date fall on a Calendar holiday, enter **A** to cleanup on the first workday **after** the holiday, enter **B** to cleanup on the last workday **before** the holiday.
- **Scheduled next**  
Date and time for which the next cleanup run is scheduled.

## CMA-SPOOL Defaults

- Defining CMA-SPOOL Defaults
- Field Descriptions
- Column Headings

CMA-SPOOL, among other spooling systems, can serve as source for the output data to be processed. Here you can define whether the CMA-SPOOL interface should be active or not.

Entire Output Management scans the specified destinations and moves the output into its own data base container for further processing. The destinations to be scanned should be defined as virtual printers reserved for Entire Output Management. The destination is switched to the specified Temporary Destination (also a virtual printer) in order to avoid processing the same queue entry again.

## Defining CMA-SPOOL Defaults

### ▶ To define default parameters for CMA-SPOOL

- Enter **8** in the command line of the Default Definition Menu and press Enter.

The CMASPOOL Defaults screen appears.

```

18:50:25          **** ENTIRE OUTPUT MANAGEMENT ****          15/04/2003
UserId UKSJU          - CMASPOOL Defaults -

Scan CMA-SPOOL queue ..... N

CMA-SPOOL Interface Version .. 90          CMA-SPOOL Version (1/2) _
Temporary Destination ..... NOMTEMP_ Time Limit ..... 6_

  Destination DBID  FNR   Destination  DBID  FNR
  _____  _____  _____  _____  _____
  NOMFIL2_    9_____  247_____  _____  _____
  _____  _____  _____  _____  _____
  _____  _____  _____  _____  _____
  _____  _____  _____  _____  _____
  _____  _____  _____  _____  _____
  _____  _____  _____  _____  _____
  _____  _____  _____  _____  _____
  _____  _____  _____  _____  _____
  _____  _____  _____  _____  _____

Command => _____
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help           Exit Flip Do      Undo                               Menu
    
```

## Field Descriptions

- **Scan CMA-SPOOL queue**  
Activate the CMA-SPOOL interface? Enter **Y** (yes) or **N** (no).
- **CMA-SPOOL Interface Version**  
Specify your current interface version of CMA-SPOOL, for example 90.
- **CMA-SPOOL Version (1/2)**  
Specify your current version of CMA-SPOOL. For versions earlier than 2.0, specify **1**. For other versions, specify **2**.
- **Temporary Destination**  
Specify a virtual CMA-SPOOL destination to which NOM routes the output to be processed.
- **Time Limit**  
Enter the maximum number of seconds the Monitor is allowed to scan for output arriving through the CMA-SPOOL interface in one cycle. A value of **0** means no limit.

## Column Headings

- **Destination**  
Specify up to 20 destinations to be scanned by Entire Output Management.
- **DBID**  
Specify the data base ID of the corresponding NOM Container File, in which to store the created Reports.
- **FNR**  
Specify the file number of the corresponding NOM Container File, in which to store the created Reports.

## Natural Advanced Facilities Defaults

- Defining Default Parameters for NAF
- Field Descriptions
- Column Headings

Instead of printing output from Natural programs in the NAF spool file (FSPOOL), you can route it to an NOM file (SYS2), from which it can be distributed, bundled or separated.

Here you can define whether the NAF/NOM interface is active and from which NAF environments output is to be processed. A separate NOM file can be assigned to each FSPOOL file. However, you can also assign the same NOM file to all FSPOOL files.

### Defining Default Parameters for NAF

 **To define default parameters for Natural Advanced Facilities**

- Enter **9** in the command line of the Default Definition Menu and press Enter.

The Natural Advanced Facilities Defaults screen appears.

```

12:28:48                **** ENTIRE OUTPUT MANAGEMENT ****                2000-07-24
UserId UKSJU           - NATURAL ADVANCED FACILITIES Defaults -

NAF Interface active .. Y                Time Limit .. 1_

  FSPOOL                FSPOOL
  DBID  FNR             DBID  FNR       DBID  FNR       DBID  FNR
  _____
  _177  _43             _9    _212      _____
  _10   _60             _9    _212      _____
  _76   _210            _9    _247      _____
  11177 _1247          _9    _247      _____
  _____
  _____
  _____
  _____
  _____
  _____
  _____
  _____

Command => _____
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help           Exit  Flip  Do    Undo                               Menu
    
```

## Field Descriptions

- **NAF Interface active**  
Should spool data from NAF be processed? Enter **Y** (yes) or **N** (no).
- **Time Limit**  
Enter the maximum number of seconds the Monitor is allowed to scan for output arriving through the NAF interface in one cycle. A value of **0** means no limit.

## Column Headings

### FSPPOOL

- **DBID FNR**  
Data base and file number as defined in the FSPPOOL parameter.
- **DBID FNR**  
NOM file (data base and file number).

**Note:**

Output is filed to a data base and is subject to the transaction logic of the data base.

- Be sure to issue an ET as soon as possible.
- Be sure to regularly issue new ETs to prevent the Hold queue from overflowing (when there is a large amount of output).
- Remember that output from BTs is also affected.
- Be sure that no user transaction is open during an Adabas CLOSE or DEFINE PRINTER.

For further information, see the subsection ET/BT Logic in the **Natural Advanced Facilities Documentation**.

## NOM API and User-Exit Defaults

- Defining API Defaults
- Field Descriptions

### Defining API Defaults

 **To define default parameters for Entire Output Management Application Programming Interfaces**

- Enter **10** in the command line of the Default Definition Menu and press Enter.

The API Defaults screen appears.

```

18:53:37          **** ENTIRE OUTPUT MANAGEMENT ****          15/04/2003
UserId UKSJU          - API Defaults -

NOM Trigger

Scan trigger queue .. Y
DBID ..... 9_____
FNR ..... 247___

Active NOM User-exits
No report definition found ..... N (NOMEX001)
Modification of spool attributes ..... N (NOMEX002)
Disallow access to Natural ISPF ..... N (NOMEX003)
Suppression of log messages ..... N (NOMEX004)
Modification of print job variables .. N (NOMEX005)
Printout statistics ..... N (NOMEX006)
Active reports application exit ..... Y (NOMEX008)
Record count optimization in BS2000 .. Y (NOMEX009)
Get log message or suppress it ..... N (NOMEX010)
Active reports export exit ..... Y (NOMEX011)
Reserved for future use ..... N (NOMEX012)

Command => _____
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help      Exit  Flip  Do      Undo                                Menu

```

## Field Descriptions

### NOM Trigger

This API can be used to explicitly trigger the processing of an output file by Entire Output Management. In JES and POWER this output file can belong to any output class.

For further information, see the member NOMTP-D and member NOMTP in the SYSNOMU and SYSNOMS libraries respectively.

- **Scan Trigger Queue**  
Should the NOM Trigger Queue be processed? Enter **Y** to activate this interface. **N** = no.

Please restart your monitor so that this setting will take effect.

- **DBID / FNR**  
Enter the database ID and file number of the NOM SYS2 system file in which the trigger data are to be stored.

### NOM User Exits

The user exits described below are located in the Natural library SYSNOMS under the names NOMEX $nnn$ , where  $nnn$  represents the sequential number of the exits.

- **Exit 1 active** (User Exit 001)  
This exit is called by the NOM monitor while scanning the spool queue. A call to this function indicates that no report definition was found for the specified source and the spool exit 001 flag was set.  
  
The exit must set the 'process' flag to TRUE to advise NOM to make the source as subject for its normal cleanup processing or FALSE to advise NOM not to process this output. In this case, the exit must switch the output from the NOM input queue to prevent subsequent processing for the same output.
- **Exit 2 active** (User Exit 002)  
This exit is called by the NOM monitor while scanning the spool queue.

The function is called if the exit 002 flag is set to allow the modification of spool attributes before they are stored in the NOM DB.

- **Exit 3 active** (User Exit 003)  
This exit is called by NOM to allow/disallow access to Natural NSPF.
- **Exit 4 active** (User Exit 004)  
This exit is called by NOM to allow suppression of log messages.
- **Exit 5 active** (User Exit 005)  
This exit is called by NOM to allow modification of print job substitution variables.
- **Exit 6 active** (User Exit 006)  
This exit is called by NOM to make available information about completed printouts.
- **Exit 7 active** (User Exit 007)  
This exit is called by the NOM user interface when certain fields are to be modified online. This exit may set init values for the fields and prohibit modification.
- **Exit 8 active** (User Exit 008)  
This exit is called by NOM to allow integration of user written application logic with NOM, allowing to store notes for an active report or even for a specific line of an active report. The exit is invoked whenever the status of an active report changes, a documented example is distributed in library SYSNOMS.  
The exit is invoked using 2 different functions:  
GET-STATUS: to return status information (containing 10 bytes) of an active report to be displayed in the list of active reports (notes field).  
INTEGRATION-EVENT: invoked by the report browser, if the PF2 key is pressed, to store environment-site and user-specific data (i.e., notes) for an active report or a specific line of an active report.
- **Exit 9 active** (User Exit 009)  
This exit is called by NOM to suppress optimization for counting lines of BS2000/OSD input data sets.

Assuming 'Rename=N' (BS2000/OSD files will not be renamed). Normally, when a BS2000/OSD data set is printed more than once by NOM, NOM will count the records in the data set only once and pass this record count on for further processing. This makes sense, because NOM assumes that the contents of the data set do not change.

Upon special customer request, this exit was created to allow suppression of this optimization. This means that for each print to NOM the same data set is counted again, the reason being that the data set can (!) change its contents and length.

In this case the flag NOMEX009-COUNT-OPTIMIZE should be set to false.

**Warning:**

Rename=N and changing contents of input files will lead to inconsistent reports unless they are all kept in the data base. For this reason, reports resulting out of BS2000/OSD data sets with changing contents must always be created with Store in NOM DB = Y; otherwise the source must be copied to a container file before processing.

- **Exit 10 active** (User Exit 010)  
Called by NOM to get or suppress a log message.
- **Exit 11 active** (User Exit 011)  
Called by NOM immediately before a record is written to the required target (PC or Con-nect) and allows modification of browsed active report data as well as suppression and insertion of records.

The exit is NOMEX011 and is activated by setting active reports export exit to Y (in NOM API and User-Exit Defaults). The object must be in a library accessible to the NOM online system. NOM221S contains a sample NOMEX011 as well as the parameter data area P-EXPEX.

**Input Parameters:**

Parameter	Explanation
P-EXP-API-VERSION	Current API version (1)
P-EXP-USERID	Userid of online user
P-EXP-TARGET	1 = PC, 2 = Connect
P-EXP-REPNAME/P-EXP-REPRNB	Report name and run number
P-EXP-RECORD	Current record
P-EXP-SOURCE-TYPE	Original source type, as documented in P-EXPEX
P-EXP-SOURCE-CC-TYPE	Original source carriage control, 1 = ASA, 2 = machine, 3 = BS2000, 4 = none
P-EXP-SOURCE-NUMBER-OF-LINES	Number of lines in original source
P-EXP-SOURCE-RECORD-LENGTH	Lrecl of original source
P-EXP-SOURCE-ATTRIBUTES	Identification attributes
P-EXP-SPOOL-ATTRIBUTES	Spool attributes
P-EXP-SPOOL-ATTRIBUTES-EXTENDED	Extended spool attributes

**Output Parameters:**

Parameter	Explanation
P-EXP-RC	0 include record as is
	4 include modified record (P-EXP-RECORD)
	8 insert P-EXP-RECNO lines from P-EXP-INSERT-LINES (next call to exit is with the same record)
	12 suppress record
	16 terminate export with message P-EXP-RT
	99 continue export without calling NOMEX011 again
P-EXP-RT	Error text for P-EXP-RC = 16
P-EXP-RECNO	Number of records to insert
P-EXP-RECORD	Modified record to be exported
P-EXP-INSERT-LINES	Up to 10 lines to be inserted
P-EXP-WORK	Work area for NOMEX011, maintained across calls.

## SAP-Spool Defaults

- Defining SAP-Spool Defaults
- Field Descriptions

SAP-Spool, among other spooling systems, can serve as source for the output data to be processed. Here you can define whether the SAP-Spool interface should be active or not.

Reports can be transferred via SAP exits to Entire Output Management for further processing, instead of being printed by the SAP Spooling System. The data are stored in the specified Adabas file (NOM Container File) and an entry is created for each Report in an internal queue. These jobs are run if SAP-Spool interface active is set to **Y**.

## Defining SAP-Spool Defaults

### ▶ To define default parameters for the SAP spool

- Enter **11** in the command line of the Default Definition Menu and press Enter.

The SAP-Spool Defaults screen appears.

```

15:53:08          **** Entire Output Management ****          27/07/1999
UserId GHH              - SAP-Spool Defaults -

SAP-Spool interface
active ..... Y
Time Limit ..... 1_

NOM container file
DBID ..... 9__
FNR ..... 212

Command => _____
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help           Exit  Flip  Do      Undo                               Menu

```

## Field Descriptions

### SAP-Spool interface

- **active**  
Enter **Y** to activate this interface. For the Monitor to begin scanning for output arriving through this interface, you must bring it down and back up again.
- **Time Limit**  
Enter the maximum number of seconds the Monitor is allowed to scan for output arriving through the SAP interface in one cycle. A value of **0** means no limit.

### NOM Container File

- **DBID**  
Enter the database ID of the Adabas file to be used as spool container.
- **FNR**  
Enter the file number of the Adabas file to be used as spool container.



```

10:34:53          **** ENTIRE OUTPUT MANAGEMENT ****          2000-11-07
User ID FHI              - Unix Node Definitions -

Cmd Node Name          Node Description          Messg.
-----
__ npr_nt              node on Windows NT          Win NT
__ npr_unix            Unix node                    Suspend
__
__
__
__
__
__
__
__
__
__
__
All
Command => _____
DE delete DI display MO modify
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help Add  Exit Flip          -      +          Menu
    
```

This list of nodes shows the current status of the open system node:

Status	Meaning
operating system	Node is active, running on operating system
Inactive	Node is not active or broker connection failed.
Suspend	Node is suspended, logons are tried each monitor cycle, error message is logged only once.
E 2034	Node may be active, but logon data invalid.
E nnnn	Connection to node failed with error nnnn.

## Available Line Commands

The following line commands are possible:

Line Command	Explanation
DI	Display node definition
MO	Modify node definition
DE	Delete node definition

## Field Descriptions

- Node
- Suspend
- Descr
- Temp
- User ID
- Passw
- Confirm

- Group
- Paths
- Container Dbid
- Container Fnr

## Node

Enter the desired node name here. A node on a Unix or Windows system is identified by its name, not by a node number. This name must be registered at a broker and entered in member SATSRV of library SYSSATU in a section like this:

```
node_name SATSRV TYPE=ACI
          BROKER-ID=...
          SERVER-CLASS=NPR
          SERVER-NAME=...
          SERVICE=node_name
          USER-ID=...
          WAIT-TIME=30S
```

For details, refer to the **NPR-UNIX Installation Documentation**.

This field is case sensitive.

## Suspend

If Unix nodes are defined, the NOM monitor will try to logon to each node at each monitor cycle. If a node cannot be accessed, the monitor will write an error message to the monitor log once and switch this field to 'Y' to indicate that the node has been suspended. If the node is up again, a message will be written to the monitor log that it has been reactivated, and file processing will start again.

## Descr

This field is informational only and describes the node definition.

## Temp

Enter a directory here where files are stored that could not be processed by NOM. This is done to keep the directories 'clean' of non-processable files which would waste CPU time.

A directory name must not contain wild characters, because it is used to identify file directories uniquely. The last character must be '/' (this is concatenated automatically), the back slash is not allowed. For Windows systems it will be created automatically.

This field is case sensitive.

## User ID

This is the user id on the target node, used to logon to the machine. NOM will get exactly the rights this user id has got on the specified node.

This field is case sensitive.

## Passw

This is the password on the target node, used to logon to the machine. It is stored and sent across the network in an encrypted format.

This field is case sensitive.

### Confirm

Since the password is entered without display, you have to confirm your password typing it twice.

This field is case sensitive.

### Group

On UNIX systems enter the group id here, on Windows systems it is the domain name. Leave this field blank to get to the default group / domain.

This field is case sensitive.

### Paths

Enter up to 10 default paths here. When creating a report, one of these paths must be selected for the report.

A directory name must not contain wild characters, because it is used to identify file directories uniquely. The last character must be '/' (this is concatenated automatically), the back slash is not allowed. For Windows systems it will be created automatically. On Windows systems drive letters (eg. 'C:/') will be recognized.

These paths are owned by NOM. The monitor will try to find reports for any of the files, copy them to the specified container file and create active reports. Then the file in the specified directory will be deleted. If no reports are found and no default report exists, the file will be moved to the directory specified in the 'Temp' field, a time stamp will be added, and NOM will forget about it.

These fields are case sensitive.

### Container Dbid

Specify the database number of the container file which is connected to this path. Only the first entry is mandatory, if the other lines are left empty, they will default to the first line.

### Container Fnr

Specify the file number of the container file which is connected to this path. Only the first entry is mandatory, if the other lines are left empty, they will default to the first line.

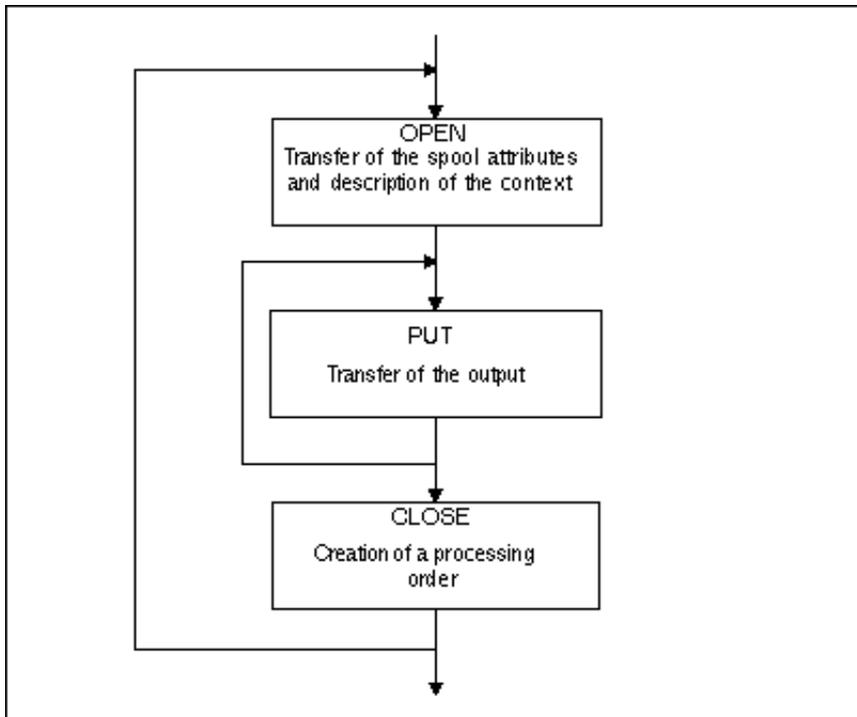
### Special PF Keys

PF Key	Function	Explanation
PF9	Path	If you want to enter very long path names, you get the chance to enter up to 69 characters. PF9 will toggle between long and short display of path names.

## 3GL Interface

- Control Block
- Data Field
- Work Area
- Transaction Logic
- Automatic ET
- Transaction Logic Controlled by Caller

The 3GL interface can transfer output page by page to Entire Output Management for further processing. The interface provides the functions OPEN, PUT, CLOSE, which must be used as follows:



The interface consists of a control block, a data field and a work area. Several lists can be transferred to Entire Output Management at the same time, however each list must have its own control block and work area.

## Control Block

Field	Offset	Length	Explanation
Function code	0	2	1= OPEN
			2= PUT
			3= CLOSE
			4=
			5= End transaction
			6= Backout transaction
Carriage control character	2	2	1= ASA code
			2= IBM machine code
			3= Siemens, EBCDIC code
			4= without carriage control character.
Interface description	4	2	Enter the number of the interface here which you have described in the 3GL Interface Defaults.
Return code	6	4	0 or error code.
ET possible	10	2	Reserved for internal use.
ET/BT necessary	12	2	Needed only when the caller is controlling the transaction logic (when automatic ET > 0).
			0= No open transaction.
			1= Transaction open.
Report opened	14	2	0= No OPEN has been performed for this control block.
			1= A Report has been opened for this control block.
Execute ET	16	2	Reserved for internal use.
Automatic ET	18	2	0= Transaction logic controlled by interface.
			>0 Transaction logic controlled by caller.
Database number	20	2	Database ID of the Container File.
File number	22	2	File ID of the Container File.
Line length	24	4	Must be supplied for the PUT function so that it can provide the line length.
Defaults at OPEN	28	2	0= Default values are not written to the control block fields at OPEN.
			1= Defaults are written to fields.
Debugging	30	2	Reserved for internal use.

## Data Field

Field	Offset	Length	Explanation
Data	0	251	Contains the spool attributes during an OPEN and the print lines during a PUT.

## Work Area

Field	Offset	Length	Explanation
Work area	0	4096	Only for internal use. The work area contains compressed output among other data.

## Transaction Logic

The print lines are stored in an Adabas database. Like any other changes to a database, the stored records must be confirmed (end transaction) or rejected (backout transaction). The transaction logic can either be executed automatically by the interface or can be determined by the caller.

## Automatic ET

If the field Automatic ET has a value >0, the interface performs an ET in the following situations:

1. during processing of the OPEN;
2. during processing of the PUT, if  $n$  records have been stored in the database since the last confirmation ( $n$ = value of Automatic ET);
3. during processing of the CLOSE.

**Warning:**

If 'Automatic ET' has a value greater than 1, the Bytes 1-63 of the spool attributes must uniquely identify the print data. We recommend always choosing 1 as the value for 'Automatic ET'.

## Transaction Logic Controlled by Caller

In addition to the OPEN, PUT, CLOSE functions, you must also perform the functions END TRANSACTION and BACKOUT TRANSACTION before calling Adabas with ET or BT.

After the CLOSE you must always perform an Adabas ET call.

**Warning:**

Bytes 1-63 of the spool attributes must uniquely identify the Report. We recommend using this option only when you are performing other database changes in your program. In all other cases, you should only work with 'Automatic ET'.

## 3GL Interface Maintenance

- Defining Default Parameters for 3GL Interfaces
- Modifying 3GL Interface Defaults
- Deleting 3GL Interface Defaults
- Displaying 3GL Interface Defaults

A 3GL interface, among others, can serve as source for the output data to be processed. OPEN, PUT and CLOSE transfer the list data to these 3GL interfaces

OPEN transfers the interface number+attributes (spool attributes) for identification and display purposes. PUT transfers one print line at a time. A CLOSE call tells the interface that the list is complete. An entry is created for processing of the list. For further details, see the subsection 3GL Interface.

The 3GL maintenance functions enable you to describe your own interface. The data entered are used to interpret the spool attributes and also to dynamically generate the Report Definition>3GL Identification and Active Reports>Spool Attributes screens.

## Defining Default Parameters for 3GL Interfaces

- Available Line Commands
- Column Headings

 **To define default parameters for 3GL interfaces**

- Enter **12** in the command line of the Default Definition Menu and press Enter.

The 3GL Interface Maintenance screen appears.

```

11:28:08          **** Entire Output Management ****          01/06/1999
User ID GHH          - 3GL Interface Maintenance -

Cmd Interface Description
-----
___ 100  NOM 3GL Interface 100
___ 101  NOM 3GL Interface 101
___ 102  NOM 3GL Interface 102
___ 103  NOM 3GL TEST EVN
___ 104  User-defined Spool (3GL Interface 104)
___
___
___
___
___
___
___
___
___
___
All
Command => _____
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help  Add   Exit  Flip          -       +                               Menu
    
```

This screen lists the defined 3GL interfaces in numerical order.

### Available Line Commands

Command	Explanation
DE	Delete 3GL Interface
DI	Display 3GL Interface
MO	Modify 3GL Interface

### Column Headings

- **Cmd**  
Enter one of the above line commands.
- **Interface**  
Unique interface number, used during OPEN to identify the interface description.
- **Description**  
This description can provide more details about the interface.

## Modifying 3GL Interface Defaults

- Invoking the 3GL Interface Defaults Screen
- Field Descriptions / Column Headings

### Invoking the 3GL Interface Defaults Screen

 This function allows you to describe the 3GL interface with the specified interface number.

- On the 3GL Interface Maintenance screen, enter MO in the two-character command line preceding the interface you want to modify and press Enter.

The 3GL Interface Defaults screen appears.

```

16:29:31          **** Entire Output Management ****          27/07/1999
UserId GHH          - 3GL Interface Defaults -

3GL Interface 104
  active ..... Y
  Time Limit ..... _
  Description ..... User-defined Spool (3GL Interface 104)_____

NOM container file
  DBID ..... 9
  FNR ..... 247

Identifying Attributes
  Prompt          Offset  Length  Order  Generic (*)
  1040_____    1_    8_    1_    Y
  1041_____    9_    8_    2_    N
  1042_____   17_    8_    3_    N
  _____    _    _    _    -

File identification
  1043_____   33_    8_

Command => _____
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help      Exit  Flip  Do    Undo          Attrb          Menu
    
```

- Enter attributes to be used as prompt in the Report Definition and link them to the spool attributes as specified in the OPEN call (Offset, Length)
- When you have finished modifying the interface, press Enter to save your modifications.

A message confirms that the defaults have been successfully modified.

### Field Descriptions / Column Headings

#### 3GL Interface nnn

- **active**  
Enter **Y** to activate this interface. For the Monitor to begin scanning for output arriving through this interface, you must bring it down and back up again.
- **Time Limit**  
Enter the maximum number of seconds the Monitor is allowed to scan for output arriving through the 3GL interface in one cycle. A value of **0** means no limit.
- **Description**  
Enter a short description of the interface being defined.

## NOM Container File

- **DBID**  
Enter the DBID of the Adabas file to be used as spool container.
- **FNR**  
Enter the FNR of the Adabas file to be used as spool container.

## Identifying Attributes

- **Prompt**  
Enter the four-digit number (library SYSNOMU) inSYSERR of the field prompt. This text is used in the Report definition to describe the identifying attributes. It will also be used in the display of spool attributes of an Active Report.
- **Offset**  
Enter the offset in spool attributes parameter. The value of the specific attribute will be extracted from this offset in the given length.
- **Length**  
Enter the length in spool attributes parameter. The value of the specific attribute will be extracted from the specified offset in the given length.
- **Order**  
Enter a number from 1 to 4 to specify the order in which the primary identification attributes will be evaluated.
- **Generic (\*)**  
Enter **Y** if this attribute is to be used generically for Report identification. Note that only one attribute can be used in this way.

## File Identification

- Prompt
- Offset
- Length

## Example

In the 3GL interface 104 during OPEN, the User ID is in bytes 1 to 8, the terminal ID in bytes 9 to 16, the program name in bytes 17 to 24 and the list name for post selection in bytes 33 to 40.

The prompts User ID, Terminal ID, Program and List Name were stored via SYSERR in the texts of numbers 1040, 1041, 1042, 1043 in the library SYSNOMU. When 3GL interface 104 is selected for Report identification, a screen like the 3GL Interface Defaults screen appears.

## Deleting 3GL Interface Defaults

- On the 3GL Interface Maintenance screen, enter DE in the two-character command line preceding the interface defaults you want to delete and press Enter.

If CONFIRM is set to ON, a window opens which asks you to confirm deletion by typing the name of the interface defaults again.

- Type the defaults name in the input field provided and press Enter.

A message confirms:

Object deleted

## Displaying 3GL Interface Defaults

- On the 3GL Interface Maintenance screen, enter DI in the two-character command line preceding the interface defaults you want to display and press Enter.

The 3GL Interface Defaults screen appears for the defaults you selected.

In display mode, you can only view the object parameters. You cannot enter or modify data because all fields are protected.