



Entire Output Management

Version 2.1.1

System Programmer's Guide

This document applies to Entire Output Management Version 2.1.1 and to all subsequent releases.

Specifications contained herein are subject to change and these changes will be reported in subsequent release notes or new editions.

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System Programmer's Documentation - Overview

This documentation covers the following topics:

- System Administration Explains the Maintenance and Control Functions available to the system administrator.
- Archive Administration Describes archiving.
- Printer Exits, User Separation Routines, Separator Pages Describes printer exits, user separation routines and separator pages.
- Transferring an Object Describes the Transfer Object facility which enables the system administrator to copy objects to a target environment on another data base.
- Report Status Explains how Entire Output Management creates active reports according to master report definitions.

System Administration

This section explains the Maintenance and Control Functions reserved for the system administrator.

Maintenance Functions

The Maintenance Functions enable the system administrator to do the following:

- Defining System Defaults
- Defining a User
- Copying Users from Natural Security
- Defining a Calendar
- Defining a Physical Printer

Control Functions

The Control Functions enable the system administrator to control the Monitor tasks, start the Archiving, Reviving and Condense tasks manually and transfer entities from one system file to another.

- Monitor Start/Close
- Start Archiving Task
- Start Reviving Task
- Start Condense Task
- Using NOP To Schedule NOM Jobs
- Long Records

To select the System Administration Menu

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

The System Administration Menu appears.

```

11:12:22          **** Entire Output Management ****          13/01/1999
User ID GHH          - System Administration -

Maintenance Functions

  1 System Defaults
  2 Users
  3 Copy NATURAL SECURITY Users
  4 Calendars
  5 Physical Printers

Control Functions

  6 Monitor Start/Close
  7 Start Archiving Task
  8 Start Reviving Task
  9 Start Condense Task

10 Transfer Entity

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

```

▶ To access the functions from the System Administration Menu

- Type their number in the command line and press Enter.

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?\$. 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
Batch Module ..... NATSAT31
System Server Jobname ... NOMX040_
Printer Tasks ..... 2_

Wait Factor
Minimum ..... 30_
Maximum ..... 60_
Increment ..... 5_

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

Jobcards
/* TRACE=ON
_____
_____

Error Handling
Retries..... 5__
Interval.... 300__

Long Records
Container File DBID ..... 9____
Container File FNR ..... 247__

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  _
  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 =&gt; _____
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.

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 a 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.

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

FSPOOL

- **DBID FNR**
Data base and file number as defined in the FSPOOL 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	Return code:	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.

UNIX Defaults

- Defining a UNIX or Windows Node
- List of Nodes
- Available Line Commands
- Field Descriptions
- Special PF Keys

You can treat any supported Unix or Windows platform as a source of output data. So it is possible to get the output of any Unix or Windows application to a container file and process it as usual, including archiving, distribution, printing on a mainframe printer, bundling, and so on.

- 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.

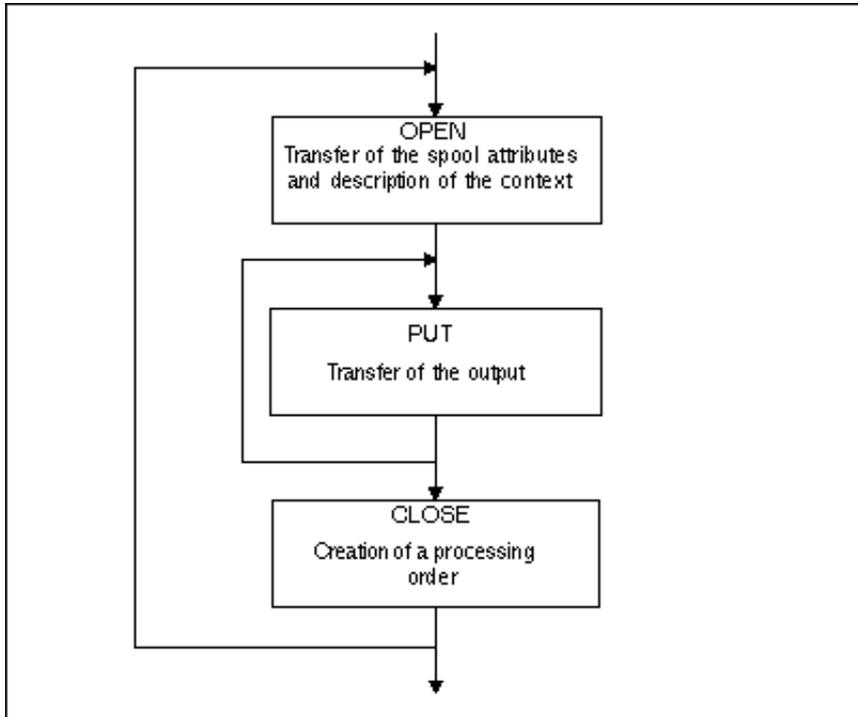
Special PF Keys

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.

Defining a User

This subsection covers the following topics:

- User Function
 - User Maintenance
 - Adding A User Record
 - Adding a User Profile
 - Displaying Log of User Activity
 - Display User Cross Reference Information
 - Copying a User Definition
 - Deleting a User Definition
 - Display User Definition Log Information
 - Modifying a User Record
 - Modifying a User Profile
-

User Function

The User function enables the system administrator to grant user access to Entire Output Management by creating and modifying user IDs with their passwords and authorization profiles.

Users are defined in Entire Output Management for the following purposes:

- Security
- Distribution Lists
- Logging

Every user in Entire Output Management is associated with a User Definition composed of:

- **User Record**
The User Record contains details about the user such as user ID, name, phone number, job title, etc.
- **User Profile**
The User Profile contains a list of functions the user is authorized to perform and some defaults.

User Maintenance

- User Maintenance Screen
- Special PF Keys
- Available Line Commands
- Column Headings

To define default parameters for Users

- Enter **2** in the command line of the System Administration Menu and press Enter.

The User Maintenance screen appears.

User Maintenance Screen

```

09:52:08          **** Entire Output Management ****          13/11/1999
User ID GHH          - User Maintenance -

Cmd User ID  Name                                     Phone
-----
___ BF       Fricke, Bernhard                          1362
___ GHH      Hahn, Gerrit                                    1367
___ GW       Wagner, Gerhard                               1366
___ MSN      Stephan, Martina                                       1785
___ RW       Warns, Ruediger                                    1372
___ USABW    Warwick, Barry                                       4405
___
___
___
___
___
___
___
___
___
___
All
Command => _____
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help  Add  Exit  Flip          -          +          Menu
    
```

This screen lists all users defined in Entire Output Management. The users are displayed in alphabetical order according to their user IDs.

 **To display only user IDs that start with a given prefix**

- Use an asterisk * to enter selection criteria in the User ID field.

Special PF Keys

PF Key	Function	Explanation
PF2	Add	Define a new user.

Available Line Commands

Command	Explanation
CO	Copy a user definition (User Record and User Profile).
DE	Delete a user definition.
DI	Display a user definition.
FO	Maintain a user's folder.
LO	Display Log information for user definition.
MO	Modify a User Record.
UL	Display all log records of user activity.
UP	Modify a User Profile.
XR	Cross reference of a user. Displays all related objects.

Column Headings

- **Cmd**
Enter one of the above line commands.
- **User ID**
The IDs of the users.
You can display only those user IDs that begin with a given prefix by using an asterisk * to enter selection criteria in the field immediately below User ID.
- **Name**
The names of the users.
- **Phone**
The telephone numbers of the users.

Adding A User Record

- Define User Screen
- Special PF Keys
- Field Descriptions

The User Record contains details about the user such as user ID, name, phone number, job title, etc.

To ADD a new User Record

- Press PF2 (Add) on the User Maintenance screen.

The Define User screen appears.

Define User Screen

```

09:58:05          **** Entire Output Management ****          12/11/1999
User ID GHH          - Define User -

User ID ..... _____

First Name ... _____
Last Name .... _____ Title .. _____
Address ..... _____
_____
_____

City ..... _____
Country ..... _____ Postal Code .. _____

Dept No ..... _____ Dept Name ... _____
Location ..... _____
Organization . _____
Work Phone
Country ... ___ Phone .. _____ Extension .. _____
Home Phone
Country ... ___ Phone .. _____

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

On this screen, you can enter user ID and name to create the User Record. You can also enter further information for the user.

Special PF Keys

PF Key	Function	Explanation
PF9	Profl	Press this key to display the User Profile Definition screen and modify Profile parameters.

Field Descriptions

- **User ID**
Enter the user ID. The user ID uniquely identifies a user in Entire Output Management and is used for security and for Report distribution. The user ID must be identified to the security package in your installation, if you have one, for example: RACF, TOP-SECRET, unless the profile field ESY User is set to N.
- **First Name**
Enter the user's first name.
- **Last Name**
Enter the user's last name.
- **Address/City/Country/Postal Code** (optional)
Enter the user's address.
- **Title** (optional)
Enter a title for the user, for example: President, Materials Manager, Dr., Ms., Mr., etc.
- **Dept No** (optional)
Enter the number of the department where the user works.
- **Dept Name** (optional)
Enter the name of the department where the user works.
- **Location** (optional)
Enter location of office where the user works.
- **Organization** (optional)
Enter the name of the organization for which the user works.

Work Phone

- **Country** (optional)
Enter the international dialing code for the user's telephone at work.
- **Phone** (optional)
Enter the number for the user's telephone at work.
- **Extension** (optional)
Enter the extension number for the user's telephone at work.

Home Phone

- **Country** (optional)
Enter the international dialing code for the user's telephone at home.
- **Phone** (optional)
Enter the number for the user's telephone at home.

Adding a User Profile

- User Profile Definition Screen
- Field Descriptions

The User Profile contains a list of functions the user is authorized to perform.

▶ To ADD a new User Profile

- Press PF9 (Profl) on the Define User screen.

The User Profile Definition screen appears.

User Profile Definition Screen

```

12:48:44          **** ENTIRE OUTPUT MANAGEMENT ****          2000-07-24
User ID UKSJU          - User Profile Definition -

User ID .. BDE
Name ..... Dreesen, Hardy

User Type      (A/G) A   Confirm      (Y/N) N   Editor Prefix  (Y/N) Y
Language Code  (1/2) 1   Auto-Commit   (E/I) E   Editor PF-Keys (Y/N) Y
ESY User       (Y/N) Y

Report         (D/M/P) P   Active Reports (D/M/P) P   Archive        (Y/N) Y
Bundle         (D/M/P) P   Active Bundles (D/M/P) P   Revive         (Y/N) Y
Distrib. List  (D/M/P) P   Printouts      (D/M/P) P   Flush Bundle   (Y/N) Y
Printer        (D/M/P) P

Phys. Printer  (D/M/P) P   Archive Admin. (Y/N) Y   Monitor Startup (Y/N) Y
Calendar       (D/M/P) P   System Defaults (D/M) M   Monitor Shutdwn (Y/N) Y
User           (D/M/P) P   Restrict Abun. (Y/N) _   Abun list format(1/2) _
                                   Displ.long names (Y/N) _   Display Mon-Log (Y/N) Y

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

```

This screen lists the functions permitted to the user.
To the right of each function there is a list of permitted values.

Field Descriptions

- **User ID**
ID of user whose profile is being defined.
- **Name**
The user's name as entered on the Define User screen.
- **User Type (A/G/O)**
 - Enter **A** to grant System Administrator status.
 - Enter **G** to grant status as a General User.
 - Enter **O** to grant status as an Operator. An operator has the same rights as a general user with the addition that he or she may manage objects in the printout queue without having explicit authorization for them.
- **Language Code (1/2)**
Specify the language code for the user interface
 - 1 English
 - 2 German.
- **ESY User**
Is the user ID defined in the external security system? Enter **Y** (yes) or **N** (no). (See also the field description for Use Owner ID).

- **Confirm (Y/N)**
Enter **Y** to open a window requesting confirmation of deletion.
Enter **N** to suppress window.
- **Auto-Commit (E/I)**
Enter **E** (explicit) to open a window requesting confirmation of modifications.
Enter **I** (implicit) to commit modifications automatically.
- **Editor Prefix**
Enter **Y** to display the six columns with line numbers on the left-hand side of the Editor screen when browsing Active Reports. Enter **N** to suppress display.
- **Editor PF Keys**
Enter **Y** to display the PF key assignments at the bottom of the Editor screen when browsing Active Reports. Enter **N** to suppress display.

Enter **D**, **M** or **P** in the appropriate field to grant the user authority to perform these functions:

Code	Function
D	Display Only
M	Display and Modify Only
P	Display, Modify and Purge

on the following objects:

- Report · Active Bundles
- Bundle · Printouts
- Distribution List · Physical Printer
- Printer · Calendar
- Active Reports · User

Enter **Y** in the appropriate field to grant the user authority to perform the following functions. Enter **N** to disallow them:

Enter **N** to disallow them:

- Display Monitor
- Archive
- Revive
- Flush Bundle
- Archive Administration
- Monitor Startup
- Monitor Shutdown
- Monitor Display
- System Defaults (D/M)
Enter **D** to grant the user authority to **display** the System Defaults.
Enter **M** to grant the user authority to **modify** the System Defaults.
- Restrict Abun (Y/N)
Enter **Y** to prevent users from listing all active bundles. Users can display and add reports only into active bundles for which they are authorized.
Enter **N** to allow users to list all active bundles. Users can display and add reports only into active bundles for which they are authorized. These bundles are highlighted in the Active Bundle List.
- Abun List Format (1/2)
This profile setting governs the behaviour of active bundle list wildcard selection. If set to **1** (the default) the user is presented a pop-up list of matching active bundle names from which he may select one. Active bundles with the selected name are then listed. If set to **2**, all matching active bundle names are listed.

- Display Long names (Y/N)
Enter **Y**, if you want the system to display long report and bundle names consisting of 25 alphanumeric characters as a maximum (see System Defaults), otherwise enter **N**.

If long-name display is not supported by the system, this field will be automatically set to **N** and then it cannot be overwritten.

- Display Mon-Log (Y/N)

Displaying User Activity Log

- Log Display for User Screen
- Special PF-Keys
- Column Headings

 **To display log information about the activity of a user**

- Enter UL in the two-character command line preceding the appropriate user and press Enter.

If long report and bundle names are to be displayed by the system (see settings in System Defaults and Adding a User Profile), the screen Log Display for User Screen takes the following form:

Log Display for User Screen

16:10:28		**** ENTIRE OUTPUT MANAGEMENT ****		2000-11-14
User ID GHH		- Log Display -For User GHH		
Date	Time	Object	Message	
20001114	11:30:34		USER LOGGED ON	
20001113	17:01:42		USER LOGGED OFF	
20001113	16:35:13		USER LOGGED ON	
20001113	11:52:31		USER LOGGED ON	
20001113	11:51:54		USER LOGGED OFF	
20001113	11:26:06		USER LOGGED ON	
20001113	11:24:24		USER LOGGED OFF	
20001113	10:59:10		USER LOGGED ON	
All				
Command => _____				
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---				
Help Exit Flip - + Ext < > Menu				

Pressing PF9 (Ext) you can switch to short names display:
Then the screen Log Display for User will take the following form:

```

16:16:25          **** ENTIRE OUTPUT MANAGEMENT ****          2000-11-14
User ID GHH      - Log Display -For User GHH

Date      Time      Object      Message
-----
20001114  11:30:34      USER LOGGED ON
20001113  17:01:42      USER LOGGED OFF
20001113  16:35:13      USER LOGGED ON
20001113  11:52:31      USER LOGGED ON
20001113  11:51:54      USER LOGGED OFF
20001113  11:26:06      USER LOGGED ON
20001113  11:24:24      USER LOGGED OFF
20001113  10:59:10      USER LOGGED ON

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

These screens display a log of all activity performed by the user selected.

Special PF-Keys

PF Key	Function	Explanation
PF10	<	Scroll to the left.
PF11	>	Scroll to the right.

Column Headings

- **Date**
The date of the activity performed.
- **Time**
The time of the activity performed.
- **Object**
The entity on which the user performed the activity.
- **Message**
A description of the activity performed.

Display User Cross Reference Information

 To display cross reference information about a user

1. Enter XR in the two-character command line preceding the appropriate user and press Enter.

The XREF of User window for the selected user opens:

```

10:32:29          **** Entire Output Management ****          12/11/1999
User ID GHH          - User Maintenance -
+-----+
Cmd U !          - XREF of User -          !          Phone
___ _ !          GHH          !          _____
___ B !
___ D ! M Relation Type          Number          !
___ D !          _____          !
___ E ! _ Authorization Report          358          !
___ G ! _ Authorization Bundle          16          !
___ G ! _ Authorization Printer          20          !          06151-92-1367
___ G ! _ Authorization Distribution List          2          !
___ H ! _ Report Definition (Distribute to)          189          !
___ H ! _ Coordinator-ID (Bundle Definition)          16          !
xr J ! _ Member of a Distribution List          1          !          06151-92-1473
___ J !          !
___ L ! PF3 = Exit          !          06151-92-1234
___ M +-----+
___ MRSD Roser, Markus          06151-92-1333
___ MRSM Roser, Markus
Top Of Data
Command =>
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10---PF11---PF12---
Help Add Exit Flip          -          +          Menu
    
```

Displays entities related to the user ID.

The entities are grouped according to the categories listed in the window above. If a category contains entities related to the user ID, you can mark that category in the **M** column with any character.

2. Mark the category for which cross reference information is to be displayed and press Enter.

A window opens listing all entities of the selected type to which the user is linked:

```

10:57:24          **** Entire Output Management ****          12/11/1999
User ID GHH          - User Ma +-----+
+-----+          !          Object          !
Cmd U !          - XREF of User !          _____          !
___ _ !          GW          !          PWR-EMPL-STD2-S          !
___ B !          !          PWR-EMPL-STD3-D          !
___ D ! M Relation Type          !          PWR-EMPL-STD3-D2          !
___ D !          _____          !          UEX-ADDFP-OPEN          !
___ E ! x Authorization Report          !          UEX-CARS-STD1          !
___ G ! _ Authorization Bundle          !          UEX-CARS-STD2          !
xr G ! _ Authorization Printer          !          UEX-CREATE          !
___ G ! _ Authorization Distribution !          UEX-EMPL-STD1          !
___ H ! _ Report Definition (Distrib !          UEX-EMPL-STD2          !
___ H ! _ Coordinator-ID (Bundle Def !          UEX-GO          !
___ J ! _ Member of a Distribution L !          UEX-INSL-ADDP          !
___ J !          !
___ L ! PF3 = Exit          ! All          !
___ M +-----+          ! PF3 = Exit PF7 = up PF8 = down          !
___ MRSD Roser, Markus          +-----+
___ MRSM Roser, Markus          99/8888888888
Top Of Data
Command =>
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10---PF11---PF12---
Help Add Exit Flip          -          +          Menu
    
```

Copying a User Definition

- On the User Maintenance screen, enter CO in the two-character command line preceding the user you want to copy and press Enter.

The Copy User Definition window opens.

To copy the user

- Type the name of the target user in the input field provided and press Enter.

A message confirms:

```
User copied successfully
```

Deleting a User Definition

- On the User Maintenance screen, enter DE in the two-character command line preceding the user 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 user ID again.

To delete the user

- Type the user ID in the input field provided and press Enter. A message confirms:

```
Object deleted
```

Display User Definition Log Information

- On the User Maintenance screen, enter LO in the two-character command line preceding the user definition for which you want to display log information and press Enter.

The Log Display screen appears for the user definition selected.

- You can display more information about a log entry by entering the IN line command in the two-character command line preceding the entry and pressing Enter.

For further details, see the subsection LO- Display Log Information for an Object and the Log Display for User screen of the Entire Output Management Reference Documentation.

Modifying a User Record

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

The Define User screen appears for the user you have selected.

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

A message confirms that the User Record has been successfully modified.

Modifying a User Profile

- On the User Maintenance screen, enter UP in the two-character command line preceding the user you want to modify and press Enter.

The User Profile Definition screen appears for the user you have selected.

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

A message confirms that the User Profile has been successfully modified.

Copying Users from Natural Security

This subsection covers the following topics:

- Copy Natural Security Users
- Copying a User or Group of Users
- Modifying a User Profile

Copy Natural Security Users

- Copy Natural Security Users Screen
- Field Descriptions
- Column Headings

This function is provided to make the process of defining Users easier. Natural Security Users can be copied to the Entire Output Management Database.

A Default Profile can be used for the Users copied. The individual User Profile can be defined directly on this screen.

To copy Users from Natural Security

- Enter **3** in the command line of the System Administration Menu and press Enter.

The Copy Natural Security Users screen appears.

Copy Natural Security Users Screen

```

09:37:25          **** Entire Output Management ****          13/11/1999
User ID GHH      - Copy NATURAL SECURITY Users -

Default Profile ==> _____

Cmd User ID  Name                T  R  B  L  P  AR  A  R  AB  F  PO  U  C  PH  Message
-----
___ AAAAAAAA          G  P  P  P  D  M  Y  Y  M  N  M  _  D  D
___ ABC              G  P  P  P  D  M  Y  Y  M  N  M  _  D  D
___ AH               G  P  P  P  D  M  Y  Y  M  N  M  _  D  D
___ ALF              ALF ALIAS RKL          -  -  -  -  -  -  -  -  -  -  -  -  -  Defined
___ ALFGROUP         G  P  P  P  D  M  Y  Y  M  N  M  _  D  D
___ ALO              G  P  P  P  D  M  Y  Y  M  N  M  _  D  D
___ ASF              Angelika Siffring     G  P  P  P  D  M  Y  Y  M  N  M  _  D  D
___ BATCH            Batch User            G  P  P  P  D  M  Y  Y  M  N  M  _  D  D
___ BF               Bernhard Fricke       G  P  P  P  D  M  Y  Y  M  N  M  _  D  D
___ BFINPL15         G  P  P  P  D  M  Y  Y  M  N  M  _  D  D
___ BFNCLIST         batch user            G  P  P  P  D  M  Y  Y  M  N  M  _  D  D
___ BFNCUPD          Batch user            G  P  P  P  D  M  Y  Y  M  N  M  _  D  D
___ BF1              Bernhard Fricke       G  P  P  P  D  M  Y  Y  M  N  M  _  D  D
Top Of Data
Command => _____
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help           Exit  Flip  Do      Undo  -      +                      Menu
    
```

Field Descriptions

- **Default Profile**

A Default Profile can be very useful when copying a large group of Users from Natural Security to Entire Output Management.

If you select a Default Profile, it is automatically used for every User copied.

To select a Default Profile, enter a User ID in the Default Profile field at the top of the screen and press Enter.

To open a User selection window, enter a question mark (?) in this field and press Enter. A help window opens. Press Enter again to open the User selection window.

When you perform the copy function, Users marked with a character are copied with the Entire Output Management User Profile of the User ID entered here.

Column Headings

- **Cmd**

To copy a User or group of Users, enter any character in this column preceding the User to be copied and press Enter. For further information, see the subsection Copying a User or Group of Users.

- **User ID**

The IDs of the Users in Natural Security are listed here.

- **Name**

The Users' names are listed here.

- **T**

User Type. Enter **A** in this column to define the User as an Administrator or **G** to define a General User.

Enter the following letters in the columns after the User names:

Code	Function
D	Display Only
M	Display and Modify
P	Display, Modify and Purge

Code	Function
Y	Function Allowed
N	Function Disallowed

For example, to grant permission to display and modify Bundles, enter **M** in the field following the User's name in the **B** column. To grant permission to archive, enter **Y** in the **A** column.

Column	Meaning	Function Codes
R	Reports	(D, M, P)
B	Bundles	(D, M, P)
L	Distribution Lists	(D, M, P)
P	Logical Printers	(D, M, P)
AR	Active Reports	(D, M, P)
A	Archive	(Y, N)
R	Revive	(Y, N)
AB	Active Bundles	(D, M, P)
F	Flush Bundle	(Y, N)
PO	Printouts	(D, M, P)
U	Users	(D, M, P)
C	Calendars	(D, M, P)
PH	Physical Printers	(D, M, P)

- **Message**

Defined appears here following the Users who have been copied.

Copying a User or Group of Users

 **To COPY a User or group of Users to Entire Output Management from the Copy Natural Security Users screen**

1. Enter any character in the one-character command field in the Cmd column preceding the User to be copied and press Enter.

Defined appears in the Message column following the Users who were copied.

If you have selected a User ID for the Default Profile, the Users marked with a character are copied with the Entire Output Management User Profile of the User ID entered in the Default Profile field.

2. Press PF5 (Do) to confirm your work.

A message appears at the bottom of the screen:

```
All modifications committed.
```

All Users copied now appear on the User Maintenance screen.
For more information, see the subsection Defining a User.

Modifying a User Profile

An individual User Profile can be modified on the Copy Natural Security Users screen before copying it to Entire Output Management.

 **To modify a User Profile**

- Overwrite the values listed on the screen for that Profile and press Enter.

This screen lists in alphabetical order all Calendars which were defined by an authorized User.

Special PF Keys

PF Key	Function	Explanation
PF2	Add	Add a Calendar.

Available Line Commands

Command	Explanation
DE	Delete a Calendar.
DI	Display a Calendar.
MO	Modify a Calendar.

Adding a Calendar

- Add Calendar Window
- Field Descriptions
- Displaying the First Half of the Year
- Special PF Keys
- Displaying the Second Half of the Year

To ADD a Calendar

- Press PF2 on the Calendar Maintenance screen.

The Add Calendar window opens:

Add Calendar Window


```

13:22:20          **** Entire Output Management ****          12/11/1999
                  - Calendar NEW-CAL          Year 1999 -

January          February          March
Monday           4 11 18 25          1 8 15 22          1 8 15 22 29
Tuesday          5 12 19 26          2 9 16 23          2 9 16 23 30
Wednesday        6 13 20 27          3 10 17 24          3 10 17 24 31
Thursday         7 14 21 28          4 11 18 25          4 11 18 25
Friday           1 8 15 22 29          5 12 19 26          5 12 19 26
Saturday       2 9 16 23 30          6 13 20 27          6 13 20 27
Sunday        3 10 17 24 31          7 14 21 28          7 14 21 28

April           May           June
Monday           5 12 19 26          3 10 17 24 31          7 14 21 28
Tuesday          6 13 20 27          4 11 18 25          1 8 15 22 29
Wednesday        7 14 21 28          5 12 19 26          2 9 16 23 30
Thursday         1 8 15 22 29          6 13 20 27          3 10 17 24
Friday           2 9 16 23 30          7 14 21 28          4 11 18 25
Saturday       3 10 17 24          1 8 15 22 29          5 12 19 26
Sunday        4 11 18 25          2 9 16 23 30          6 13 20 27
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
Help          Exit Wkdy          -          +
    
```

Special PF Keys

PF Key	Function	Explanation
PF4	Wkdy	Define working days and weekends.
PF7	-	Display previous 6 months.
PF8	+	Display next 6 months.

Displaying the Second Half of the Year

 To display the months from July to December

- Press PF8 (+).

The Calendar Definition screen appears for the second half of the year selected:

```

13:24:48          **** Entire Output Management ****          12/11/1999
                  - Calendar GHHCAL      Year 1999 -

      July                August                September
Monday           5 12 19 26                2  9 16 23 30                6 13 20 27
Tuesday          6 13 20 27                3 10 17 24 31                7 14 21 28
Wednesday        7 14 21 28                4 11 18 25                1  8 15 22 29
Thursday         1  8 15 22 29                5 12 19 26                2  9 16 23 30
Friday           2  9 16 23 30                6 13 20 27                3 10 17 24
Saturday       3 10 17 24 31                7 14 21 28                4 11 18 25
Sunday        4 11 18 25                1  8 15 22 29                5 12 19 26

      October            November            December
Monday           4 11 18 25                1  8 15 22 29                6 13 20 27
Tuesday          5 12 19 26                2  9 16 23 30                7 14 21 28
Wednesday        6 13 20 27                3 10 17 24                1  8 15 22 29
Thursday         7 14 21 28                4 11 18 25                2  9 16 23 30
Friday           1  8 15 22 29                5 12 19 26                3 10 17 24 31
Saturday       2  9 16 23 30                6 13 20 27                4 11 18 25
Sunday        3 10 17 24 31                7 14 21 28                5 12 19 26
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help          Exit  Wkdy          -      +
    
```

▶ To display the first 6 months from January to June again

- Press PF7 (-).

The Calendar Definition screen appears for the first half of the year selected.

Defining Weekly Holidays, Working Days, and Annual Holidays

Annual holidays and weekly holidays appear **highlighted** on the Calendar Definition screen. Working days appear **without highlight**.

- Weekly Holidays
- Working Days
- Changing a Working Day to an Annual Holiday
- Changing an Annual Holiday to a Working Day

Weekly Holidays

A **weekly holiday** is a non-working day that recurs every week. Saturday and Sunday, for example, are usually weekly holidays.

▶ To define weekly holidays

1. Press PF4 (Wkdy) on the Calendar Definition screen.

A window opens in which you can mark weekly holidays for the Calendar you are creating:

```

13:42:43          **** Entire Output Management ****          12/11/1999
                  - Calendar GHHCAL          Year 1999 -
                  +-----+
                  Ja !
Monday            4 ! - Calendar GHHCAL          Year 1999 - ! 8 15 22 29
Tuesday          5 !
Wednesday        6 !
Thursday         7 !      Please mark weekly holidays      ! 1 18 25
Friday           1 8 !
Saturday       2 9 !      _ Monday                ! 3 20 27
Sunday        3 10 !      _ Tuesday               ! 4 21 28
                  !      _ Wednesday              !
                  Ap !      _ Thursday              ! June
Monday           5 !
Tuesday          6 !      S Saturday              ! 8 15 22 29
Wednesday        7 !      S Sunday                ! 9 16 23 30
Thursday         1 8 !
Friday           2 9 !      S Set    R Reset        ! 1 18 25
Saturday       3 10 !
Sunday        4 11 !      PF3 End                ! 3 20 27
                  !
Enter-PF1---PF2---P +-----+ -PF10--PF11--PF12---
                  Help      Exit  Wkdy          -      +

```

2. Enter **S** in the one-character field preceding the day or days to be selected as weekly holidays. Press Enter.

The window closes and all weekly holidays appear **highlighted** on the Calendar Definition screen.

Working Days

▶ To change a weekly holiday to a weekly working day

- Press PF4 (Wkdy) on the Calendar Definition screen. When the window opens, enter **R** in the one-character field preceding the day(s) to be selected as working days. Press Enter.

The window closes and all working days appear on the Calendar Definition screen **without highlight**.

Changing a Working Day to an Annual Holiday

▶ To change one working day to an annual holiday

- Move the cursor to the date to be changed on the Calendar Definition screen. Overwrite the date with any character and press Enter.

The date selected appears **highlighted** on the Calendar Definition screen.

Changing an Annual Holiday to a Working Day

▶ To change an annual holiday or one weekly holiday to a working day

- Move the cursor to the date to be changed on the Calendar Definition screen. Overwrite the date with any character and press Enter.

The date selected appears **without highlight** on the Calendar Definition screen.

Deleting a Calendar

To delete a calendar

1. On the Calendar Maintenance screen, enter DE in the two-character command line preceding the Calendar 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 Calendar again.

2. Type the Calendar name in the input field provided and press Enter.

A message confirms deletion.

Displaying a Calendar

To display a calendar

- On the Calendar Maintenance screen, enter DI in the two-character command line preceding the Calendar which you want to display and press Enter.

The Calendar selected appears.

In display mode you can only view the entity parameters.
You cannot modify data because all data are protected.

Modifying a Calendar

To modify a calendar

1. On the Calendar Maintenance screen, enter MO in the two-character command line preceding the Calendar you want to modify and press Enter.

The Calendar Definition screen appears for the Calendar you have selected.

You can modify the Calendar as described under the heading Defining Weekly Holidays, Working Days and Annual Holidays.

2. When you have finished modifying the Calendar, press Enter to save your modifications.

A message confirms that the Calendar has been successfully modified.

Defining a Physical Printer

A Physical Printer is a VTAM printer, a system printer or a data set, when printing to disk, to tape or to Con-nect.

This subsection covers the following topics:

- Listing Physical Printers
 - Adding a Physical Printer
 - Defining Special Attributes for a Physical Printer
 - Defining Substitute Variable Values
 - Displaying Special Attributes in Detail
 - Printer Attributes
 - XML Printers
 - Deleting a Physical Printer
 - Modifying a Physical Printer
-

Listing Physical Printers

- Physical Printer Maintenance Screen
- Special PF Keys
- Available Line Commands
- Column Headings

To define a Physical Printer

- Enter **5** in the command line of the System Administration Menu and press Enter.

The Physical Printer Maintenance screen appears.

Physical Printer Maintenance Screen

```

13:58:19          **** Entire Output Management ****          12/11/1999
User ID GHH      - Physical Printer Maintenance -

Cmd Printer  Type      Location          Program  Skeleton Monitor
-----
___ CON-NECT  CON-NECT          RMPCNT      MAIN
___ CONNECT1  CON-NECT          RMPCNT      MAIN
___ CONNECT2  CON-NECT          RMPCNT      MAIN
___ CONNECT3  CON-NECT          RMPCNT      MAIN
___ DAEPR12   VTAM              RMPRVTM     MAIN
___ DAEPR14   VTAM      VTAM Printer DAEPR14  RMPRVTM     MAIN
___ DAEPR45   VTAM              RMPRVTM     MAIN
___ MRSPRPWR  SYSPRPWR  Print to Power  RMPRWKF  SYSPRPWR  MAIN
___ SYSPRJES  SYSPRJES          RMPRWKF  SYSPRJES  MAIN
___ SYSPRPWR  SYSPRPWR          RMPRWKF  SYSPRPWR  MAIN
___ TAPEVSE   TAPEVSE          RMPRWKF  TAPEVSE   MAIN
___
___
___
All
Command =>
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help  Add   Exit  Flip          -      +                      Menu
    
```

This screen lists all defined Physical Printers which can be used in the system.

Special PF Keys

PF Key	Function	Explanation
PF2	Add	Add a Physical Printer

Available Line Commands

Command	Explanation
CO	Copy Physical Printer definition
DE	Delete Physical Printer definition
DI	Display Physical Printer definition
MO	Modify Physical Printer definition

Column Headings

- **Cmd**
Enter one of the above line commands.
- **Printer**
VTAM ID of Physical Printer or SYSPRINT for system printer, DISK for printing to disk.
- **Type**
Printer type.
- **Location**
The location of the Physical Printer.
- **Program**
Program which performs the actual printing.

- **Skeleton**
JCL skeleton used when printing in batch mode.
- **Monitor**
The monitor responsible for control of this Physical Printer.

Adding a Physical Printer

- Physical Printer > General Attributes Screen
- Special PF Keys
- Field Descriptions

To ADD a Physical Printer

- Press PF2 (Add) on the Physical Printer Maintenance screen.

The Physical Printer >General Attributes screen appears.

Physical Printer > General Attributes Screen

```

14:10:27          **** Entire Output Management ****          12/11/1999
User ID GHH      - Physical Printer >General Attributes -

Printer ID ..... _____
Location ..... _____

Monitor .....

Printer type ..... _____
Print program ..... _____

Job skeleton ..... _____
Escape character ..... _

Maximum lines ..... _____

Time windows
  From ..... _____
  To ..... _____

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

Special PF Keys

PF Key	Function	Explanation
PF2	Add	Add a Physical Printer.
PF9	Attrb	Special Attributes of the printer. This PF key assignment becomes active as soon as general attributes are available for a printer. See the subsection Defining Special Attributes for a Physical Printer and the subsection Printer Attributes.
PF10	Edit	Edit the skeleton.

Field Descriptions

- **Printer ID**
Enter the ID of the Physical Printer.
- **Location**
Enter the location of the Physical Printer. For example: 2nd floor, room 216.
- **Monitor**
The name of the monitor controlling this Physical Printer. In a single-mode environment, the name will always be MAIN.
- **Printer type**
The following printer types are supported by Entire Output Management:

Printer Type	Explanation
CMA-SPOOL	Printer CMA-SPOOL
Con-nect	Print to Con-nect
DISKMVS	Print data to disk (OS/390)
ECL	Entire Output Management PC Link from V211
E-MAIL	Physical Printer representing one or more email addresses.
NAF	Print on Natural Advanced Facilities logical printer
SYSPRBS2	System printer in BS2000/OSD
SYSPRJES	System printer in JES (OS/390)
SYSPRPWR	System printer in POWER (VSE/ESA)
TAPEMVS	Print data on tape (OS/390)
TAPEVSE	Print data on tape (VSE/ESA) ¹
VTAM	VTAM printer
WINPM	Windows Print Server
XML	XML printer

Enter an asterisk * and press Enter to display a selection list of all printer types.

- **Print program**
Name of the program which does the actual printing.
- **Job skeleton**
Name of the job skeleton in the SYSNOMU library, that is used when printing in batch mode. Press PF10 (Edit) to edit this job skeleton.
- **Escape character**
Special character used to identify substitution variables.
- **Maximum lines**
Enter the maximum number of lines allowed to be printed on this printer.

Time windows

- **From / To**
Printing is allowed only during the specified time intervals.

Defining Special Attributes for a Physical Printer

- Physical Printer > Special Attributes Screen
- Column Headings
- Special PF Keys

 **To define special attributes for a Physical Printer**

- Press PF9 Attrbon on the Physical Printer > General Attributes screen.

The Physical Printer >Special Attributes screen appears.

Physical Printer > Special Attributes Screen

```

14:30:48          **** Entire Output Management ****          12/11/1999
User ID GHH      - Physical Printer >Special Attributes -

Attributes

Field Prompt      Default Value
Burst
Chars
Class
Cmpact
Destination
Delt
Disp
Fcb
Flash
Form
Jsep
Modify
Password
Rbc
Top Of Data
Command => _____
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help Add  Exit Flip Do  Undo  -   +   Zoom Promp Var  Menu
    
```

Column Headings

- **Field Prompt**
This is used in the Logical Printer definition as well as in the Printout Definition screens. The variables listed here depend on the type of printer (see the subsection Printer Attributes).
- **Default value**
The contents of this field will be used if nothing is specified in the Logical Printer definition.

Special PF Keys

PF Key	Function	Explanation
PF9	Zoom	Place cursor on appropriate line and press PF9 to display special attribute in detail. See the Physical Printer>Special Attributes (Detail) screen.
PF10	Prom	Switches display to Field Prompt (as in screen above). These field prompts appear in the Logical Printer and Printout Definition screens.
PF11	Var	Switches display to Subst. Variable. These substitution variables can be used if job skeletons are displayed.

Defining Substitute Variable Values

- Physical Printer > Special Attributes - Subst. Variable Screen
- Column Headings
- Special PF Keys

This screen is called when PF11 is pressed in the screen on the previous page. Instead of the Field Prompts, the substitution variables that can be used in job skeletons are displayed.

Physical Printer > Special Attributes - Subst. Variable Screen

```

14:51:57          **** Entire Output Management ****          12/11/1999
User ID GHH      - Physical Printer >Special Attributes -

Attributes

Subst. Variable Default Value
BURST_____
CHARS_____
CLASS_____
COMPACT_____
DEST_____
DELT_____
DISP_____
FCB_____
FLASH_____
FNO_____
JSEP_____
MODIFY_____
PWD_____
RBC_____

Top Of Data
Command => _____
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help Add  Exit  Flip Do   Undo  -   +   Zoom Promp Var  Menu
    
```

Column Headings

- **Subst. Variable**
This is used if job skeletons are displayed.
- **Default value**
If no substitution variable is specified, this value is taken for function Add Logical Printer.

Special PF Keys

PF Key	Function	Explanation
PF9	Zoom	Place cursor on appropriate line and press PF9 to display special attribute in detail.
PF10	Prom	Switches display to Field Prompt. These field prompts appear in the Logical Printer and Printout Definition screens.
PF11	Var	Switches display to Subst. Variable. These substitution variables can be used if job skeletons are displayed.

Displaying Special Attributes in Detail

- Physical Printer > Special Attributes - Detail Screen
- Field Descriptions

This window appears when PF9 is pressed in either of the previous two screens. All parameters of a Physical Printer Special Attribute are displayed.

Physical Printer > Special Attributes - Detail Screen

```

13:37:47          **** Entire Output Management ****          13/12/1999
User ID MRS      - Physical Printer >Special Attributes -

Attributes

  Field Prompt   Default Value
  Burst
+-----More:          >+
!
!
! Attributes
!
! Subst. Variable .. BURST_____
! No. .... 5028
! Field Prompt .... Burst
! Field Length .... 1_
! Default Value .... _
!
!
+-----+

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

Field Descriptions

The following fields **cannot** be modified:

- **Subst. Variable**
This is used if job skeletons are displayed.
- **No.**
Error number from the SYSERR application used to determine the prompt text.
- **Field Prompt**

This is used in the Logical Printer definition as well as in the Printout Definition screens.

- **Field Length**
Length of the input field as used in the Logical Printer definition.

The following field **can** be modified.

- **Default value**
The contents of this field are used if nothing is specified in the Logical Printer definition.

Printer Attributes

Depending on the type of Physical Printer, there are different sets of physical attributes. The following Physical Printer types are supported:

- CMA-SPOOL
- Con-nect
- DISKMVS
- ECL 2.1.1
- E-MAIL
- NAF
- SYSPRBS2
- SYSPRJES
- SYSPRPWR
- TAPEMVS
- TAPEVSE
- VTAM
- WINPM
- XML

CMA-SPOOL

- **Account**
Enter the account number to be used.
- **Chars**
Enter the character table to be used.
- **Class**
Enter the output class to be used for system printers.
- **System ID**
Enter system affinity.
- **Fcb**
Enter the FCB image that describes the length (and width - optional) of a page.
- **Formdef**
Enter the name of the FORMDEF to be used.
- **Form**
Enter the name of the form to be used.
- **Hold**
Should the printout be held by CMA-SPOOL? Enter YES/NO).
- **Linect**
Enter the maximum number of lines to be printed on a page.
- **Limit**
Enter the maximum number of lines allowed.
- **Filename**
Enter the name of the output file.

- **Pagedef**
Enter the name of the PAGEDEF to be used.
- **Programmer**
Enter the programmer's name.
- **Prmode**
Enter PAGE to use page mode as PRMODE.
- **Retention**
How long should the print file be retained after printing? Enter the retention period (in hours).
- **Room number**
Enter the room number.
- **Trc**
TRC (table reference characters). Enter YES/NO.
- **Writer**
Enter the name of the NJE writer.

Con-nect

- **DBID**
Data base ID of the Con-nect system file.
- **FNR**
File number of the Con-nect system file.
- **Cabinet**
Name of the Con-nect cabinet. You can leave this field blank. In this case, the document is created in the cabinet of the user who issued the Printout.
- **Document name**
Name of the Con-nect document. In this case, the document name is constructed from the Report/Bundle name, the run number of the object to be printed and the run number of the Printout.
- **Document format**
Enter the Document format to be used.

0 = Text document
1 = Con-form document (default)
- **Description**
Enter up to four lines of Document description.
- **Keywords**
Enter up to six keywords for the document.

DISKMVS

- **Data set**
Enter the data set name to be used.
- **Member**
Enter the member name to be used.
- **Dataclas**
Enter the DATACLAS parameter.
This corresponds to the DATACLAS JCL parameter.
- **Dcb**
Enter the DCB parameter. This corresponds to the DCB JCL parameter.
- **Disp**
Enter the Disposition parameter.
- **Expdt**
Enter the EXPDT parameter. This corresponds to the EXPDT JCL parameter.
- **Like**
Enter the LIKE parameter. This corresponds to the LIKE JCL parameter.

- **Lrecl**
Enter the record length to be used (for records of variable length, this is the maximum record length + record length field).
- **Mgmtclas**
Enter the MGMTCLAS parameter.
This corresponds to the MGMTCLAS JCL parameter.
- **Msvgp**
Enter the MSVGP parameter. This corresponds to the MSVGP JCL parameter.
- **Recfm**
Enter the record format to be used. In addition, this entry determines whether the data are printed with ASA/machine code or without carriage control characters.
- **Retpd**
Enter the RETPD parameter. This corresponds to the RETPD JCL parameter.
- **Space**
Enter the SPACE parameter. This corresponds to the SPACE JCL parameter.
- **Storclas**
Enter the STORCLAS parameter.
This corresponds to the STORCLAS JCL parameter.
- **Unit**
Enter the Unit type.
- **Volser**
Enter the Volser where the data set is located.
- **Work file**
This entry is made automatically according to the record format (RECFM) used.

ECL 2.1.1

- **Service**
Enter the name of the label in member SATSRV in library SYSSATU which identifies the set of attributes needed for client/server communication with the print server running under OS/2 or Windows. To use different members specify <member.label>.
- **Barcode**
Enter the name of the BARCODE resource to be used.
- **Cond. processing**
Specifies the maximum nesting level for conditional processing. If it is AFP, this value is always 1. With PFM, the maximum value is 32767.
- **Destination**
Name of a logical destination as defined in ECL.
- **Disposition**
 - Hold - Hold before print.
 - Keep - Keep after print.
 - Delete - Delete after print.
- **Formdef**
Enter the name of the FORMDEF resource if the output is to be formatted.
- **Pagedef**
Enter the name of the PAGEDEF resource if the output is to be formatted.
- **Trc**
Enter YES if your print file contains font indices.
- **Trace**
Enter YES to activate the trace facility. The trace output will be written to the ESY log.

E-MAIL

- **Recipient**
Enter up to 10 e-mail addresses to which to send the report. Enter the "at" sign "@" as "(a)".
 - **Recipient-CC**
Enter up to 10 e-mail addresses to which to send the report as "CC" (carbon copy). Enter the "at" sign "@" as "(a)".
 - **From**
This is the name which will appear as the sender of the e-mail.
 - **Node**
This Entire System Server node will be used to send the mail. It can be different from the node the NOM monitor uses.
- Notes:**
- If this field is left blank, the node number of the NOM monitor will be used. If this is the case, the monitor user ID (usually 'NOMMON') must be enabled for 'UNIX Services' in your security system (like RACF or ACF2).
 - If the node number is different from the NOM monitor's number, any user ID that sends an e-mail is used for sending and must be enabled accordingly.
- **Encrypt**
In an NPR version above 321 you will be able to encrypt the e-mail message, if you enter **Y** here.
 - **Subject**
The subject of the e-mail to be sent.

NAF

- **Printer Profile**
Enter the name of a Natural Advanced Facilities Logical Printer Profile (LPF). The LPF determines which printer is used. For further information, see the appropriate **Natural Advanced Facilities Documentation**.
- **CC Table**
Enter the PROFILE parameter. For further information, see the appropriate Natural Advanced Facilities documentation.
- **Forms**
Enter the FORMS parameter. For further information, see the description of the DEFINE PRINTER command in the **Natural Reference Documentation**.
- **Listname**
Enter the NAME parameter. For further information, see the description of the DEFINE PRINTER command in the **Natural Reference Documentation**.
- **Disposition**
Enter the DISP parameter (DEL/HOLD/KEEP). For further information, see the description of the DEFINE PRINTER command in the **Natural Reference Documentation**.

SYSPRBS2

- **Orig. attributes**
Should original print attributes be used? Enter YES/NO.
- **Chars-modification**
Should all character set characteristics be used or only certain ones?
Enter YES/NO.
- **Chars**
Enter one or several character sets to be used for printing.
- **Class**
Enter job class to be used for the SPOOLOUT job.
- **Control**

- Determines whether control characters specific to laser printers should be used.
- **Destination**
Determines logical printer to be used.
- **Dia**
Enter the Formulardia to be used.
- **Document-format**
Specifies the type of the document contents.
- **Fob**
Enter the Forms Overlay Buffer (FOB) for overlaying printed pages with text and pictures.
- **Form**
Enter the type of form to be used.
- **Header**
Determines whether a header line should be printed on each page.
- **Image**
Enter the name of a parameter file containing LOOP-, FOB- and CHARS-POOL sets.
- **Lines**
Enter the number of lines to be printed on a page.
- **Loop**
Enter the name of the LOOP set to be loaded in the carriage information buffer of the printer.
- **Pagecc**
Determines whether control characters should be evaluated.
- **Pname**
Job name for the SPOOLOUT job.
- **Rotation**
Allows page rotation for output on laser printers.
- **Rotation-loop**
Enter the name of loop for output in landscape format.
- **Shift**
Enter the number of columns by which the output text should be indented.
- **Space**
Determines the number of line feeds or the type of carriage control characters contained.
- **Text**
This is stored in the SPOOL Control Block (SCB) for the processing of system exits.
- **Transl.Table**
Enter the code translation table to be activated.
- **Tray**
Enter the number of the tray from which to extract paper for printing.

SYSPRJES

- **Burst**
Enter the BURST parameter. This corresponds to the BURST JCL parameter.
- **Chars**
Enter one or more 4-byte character set names as in JCL.
- **Ckptline**
Enter the maximum lines in a logical page. This corresponds to the CKPTLINE JCL parameter.
- **Ckptpage**
Enter the number of logical pages to be printed before JES takes a checkpoint. This corresponds to the CKPTPAGE JCL parameter.
- **Ckptsec**
Specify how many seconds of printing are to elapse between each checkpoint for the SYSOUT data set. This corresponds to the CKPTSEC JCL parameter.
- **Class**
Enter a one-character JES output class for the printout.

- **Compact**
Enter the COMPACT parameter. This corresponds to the COMPACT JCL parameter.
- **Datack**
Enter the DATAACK parameter. This corresponds to the DATAACK JCL parameter.
- **Dcb**
Enter the DCB parameter. This corresponds to the DCB JCL parameter.
- **Destination**
Enter the JES destination parameter.
- **Fcb**
Enter the Forms Control Buffer. This corresponds to the FCB JCL parameter.
- **Flash**
Enter the FLASH parameter. This corresponds to the FLASH JCL parameter.
- **Formdef**
Enter the name of the library member that PSF uses in printing on a page-mode printer.
- **Forms**
Enter the name of the form. This corresponds to the FORMS JCL parameter.
- **Index**
Enter the INDEX parameter. This corresponds to the INDEX JCL parameter.
- **Lindex**
Enter the LINDEX parameter. This corresponds to the LINDEX JCL parameter.
- **Lrecl**
Enter the LRECL parameter. This corresponds to the LRECL JCL parameter.
- **Modify**
Enter the MODIFY parameter. This corresponds to the MODIFY JCL parameter.
- **Pagedef**
Enter the name of the library member that PSF uses in printing on a page-mode printer.
- **Prmode**
Enter the PRMODE parameter. This corresponds to the PRMODE JCL parameter.
- **Recfm**
Enter the RECFM parameter. This corresponds to the RECFM JCL parameter.
- **Trc**
Enter the TRC parameter. This corresponds to the TRC JCL parameter.
- **Ucs**
Enter the UCS parameter. This corresponds to the UCS JCL parameter.
- **Work file**
This entry is made automatically according to the record format (RECFM) used.

SYSPRPWR

- **Burst**
Enter the BURST parameter. This corresponds to the BURST JCS parameter.
- **Chars**
Enter one or more 4-byte character set names as in JCS.
- **Class**
Enter a one-character POWER output class for the printout.
- **Cmpact**
Enter the CMPACT parameter. This corresponds to the CMPACT JCS parameter.
- **Destination**
Enter the POWER destination parameter.
- **Delt**
Enter the DELT parameter. This corresponds to the DELT JCS parameter.
- **Disp**
Enter the DISP parameter. This corresponds to the DISP JCS parameter.
- **Fcb**

- Enter the Forms Control Buffer. This corresponds to the FCB JCS parameter.
- **Flash**
Enter the FLASH parameter. This corresponds to the FLASH JCS parameter.
- **Form**
Enter the name of the form on which the Report or Bundle is to be printed.
This corresponds to the FORM JCS parameter.
- **Jsep**
Enter the JSEP parameter. This corresponds to the JSEP JCS parameter.
- **Modify**
Enter the MODIFY parameter.
This corresponds to the MODIFY JCS parameter.
- **Password**
Enter the PWD parameter. This corresponds to the PWD JCS parameter.
- **Rbc**
Enter the RBC parameter. This corresponds to the RBC JCS parameter.
- **Rbm**
Enter the RBM parameter. This corresponds to the RBM JCS parameter.
- **Rbs**
Enter the RBS parameter. This corresponds to the RBS JCS parameter.
- **Remote**
Enter the REMOTE parameter.
This corresponds to the REMOTE JCS parameter.
- **Sysid**
Enter the SYSID parameter. This corresponds to the SYSID JCS parameter.
- **Ucs**
Enter the UCS parameter. This corresponds to the UCS JCS parameter.
- **User**
Enter the USER parameter. This corresponds to the USER JCS parameter.

TAPEMVS

- **Data set**
Enter the data set name to be used.
- **Disp**
Enter the Disposition parameter.
- **Blksize**
Enter the block size to be used.
- **Recfm**
Enter the RECFM parameter. This corresponds to the RECFM JCL parameter.
- **Lrecl**
Enter the record length to be used.
- **Dcb**
Enter the DCB parameter. This corresponds to the DCB JCL parameter.
- **Label**
Enter the LABEL parameter. This corresponds to the LABEL JCL parameter.
- **Unit**
Enter the Unit type.
- **Volser**
Enter the Volser where the data set is located.
- **Work file**
This entry is made automatically according to the record format (RECFM) used.
- **Expiration**
Enter the retention period for the data set.

TAPEVSE

- **Data set**
Enter the data set name to be used.
- **Volser**
Enter the Volser where the data set is located.
- **Unit**
Enter the Unit type.
- **Disp**
Enter the Disposition parameter.
- **Recfm**
Enter the RECFM parameter. This corresponds to the RECFM JCL parameter.
- **Work file**
This entry is made automatically according to the record format (RECFM) used.
- **Blksize**
Enter the block size to be used.
- **Carriage control**
Enter YES, if printing is to be done with carriage control. Enter NO, if not.
- **Expiration**
Enter the retention period for the data set.

VTAM

- **Carriage control**
Enter YES, if printing is to be done with carriage control. Enter NO, if not.
- **Form feed before**
Enter the number of form feeds to be performed at the beginning of a printout.
- **Form feed after**
Enter the number of form feeds to be performed at the end of a printout.
- **Trace**
Enter YES, if you want a trace to be written by Entire System Server.
- **Logmode**
Enter a special log mode, if desired.

WINPM

- **Service**
Enter the name of the label in member SATSRV in library SYSSATU which identifies the set of attributes needed for client/server communication with the print server running under OS/2. To use different members, specify <member.label>.
- **Barcode**
Enter the name of the BARCODE resource to be used.
- **Cond. processing** (beginning with ECL 2.1.1)
Specifies the maximum nesting level for conditional processing. If it is AFP, this value is always 1. With PFM, the maximum value is 32767.
- **CR-Sequence**
Enter the carriage return sequence.
- **Destination**
Enter the name of the destination spool queue.
- **Device type** (beginning with ECL 2.1.1)
Enter the printer languages of your printer, for example, PCL4/PCL5.
- **Disposition** (beginning with ECL 2.1.1)
 - Hold - Hold before print.
 - Keep - Keep after print.

- Delet - Delete after print.
- **Form feed after**
Enter the number of form feeds to be performed at the end of the output.
- **Form feed before**
Enter the number of form feeds to be performed at the beginning of the output.
- **FF-Sequence**
Enter the sequence for form feed.
- **Frame**
Enter the number of pages that make up a frame. Under Windows it is possible to divide a printout into several portions, so that the print manager can start printing while remaining portions are still being created. Control is also yielded to other tasks between each portion.
- **LF-Sequence**
Enter the sequence for line feed.
- **Formdef** (from ECL 2.1.1)
Enter the name of the FORMDEF resource, if the output is to be formatted.
- **Pagedef** (from ECL 2.1.1)
Enter the name of the PAGEDEF resource, if the output is to be formatted.
- **Trc** (from ECL 2.1.1)
Enter YES, if your print file contains font indices.
- **Trace** (beginning with ECL 2.1.1)
Enter YES to activate the trace facility. The trace output will be written to the ESY log.

XML Printers

- Stylesheet in Report Definition
- Stylesheet stored in SYSNOMU
- Combined Method

Physical (and logical) printers of type XML allow XML stylesheets to be merged with XML documents at print time. The output of an XML printer is always a dataset. On z/OS and compatible systems it is a disk file; on VSE it is a tape file; on OSD it is a print file. An XML printer has the same attributes as its equivalent dataset printer (DISKMVS, TAPEVSE or SYSPRBS2).

Stylesheet in Report Definition

The stylesheet is resolved at print time as follows. If the document contains:

```
<?xml-stylesheet href="[file://EOM/*]" >
```

the default stylesheet is taken from the definition of the report being printed. For example, if the report is defined with a stylesheet of HTTP://SERVER1/MYSTYLE.XLS, the document is adjusted at print time to contain:

```
<?xml-stylesheet href="[HTTP://SERVER1/MYSTYLE.XLS]" >
```

Stylesheet stored in SYSNOMU

Stylesheets may also be stored as source members in SYSNOMU. In this case the document (or report definition) may specify something like:

```
<?xml-stylesheet href="[file://EOM/SYSNOMU/MYSTYLE]" >
```

This print line is suppressed and the contents of MYSTYLE from library SYSNOMU are inserted in its place. This implies that, for this method of inserting a stylesheet, the `<?xml-stylesheet >` must be on a line of its own.

Combined Method

The two methods can be combined, so that the document itself refers to `file://EOM/*`, which instructs the print task to take the stylesheet URL from the report definition. The report definition then specifies `FILE://EOM/SYSNOMU/MYSTYLE`, which instructs the print task to suppress the `<?xml-stylesheet >` and insert the contents of MYSTYLE.

Additionally, a printer exit can specify the stylesheet by inserting a record containing the URL of the stylesheet to be used. The printer exit may not specify `file://EOM/*` but it can specify `FILE://EOM/SYSNOMU/MYSTYLE`. The contents of any inserted stylesheet are not passed to the printer exit. No stylesheet interpretation is performed.

Deleting a Physical Printer

To delete a physical printer

- On the Physical Printer Maintenance screen, enter DE in the two-character command line preceding the Physical Printer 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 Physical Printer again.

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

A message confirms deletion.

Modifying a Physical Printer

To modify a physical printer

- On the Physical Printer Maintenance screen, enter MO in the two-character command line preceding the Physical Printer you want to modify and press Enter.

The Physical Printer Definition screen appears for the Physical Printer you have selected.

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

A message confirms that the Physical Printer definition has been successfully modified.

Monitor Start/Close

The Monitor runs as a Natural subtask under Entire System Server or as a batch job and does all the work of generating, printing and distributing Reports and Bundles.

This subsection covers the following topics:

- Monitor Management Screen
- Starting the Monitor
- Waking the Monitor
- Closing the Monitor
- Modifying the Wait Time between Two Monitor Cycles
- Displaying Monitor Log
- Purging Monitor Buffer Pool
- Purging a Single Buffer Pool Entry
- Monitor Task Management

Monitor Management Screen

- Special PF Keys
- Field Descriptions

▶ To select Monitor Start/Close

- Enter **6** in the command line of the System Administration menu and press Enter.

The Monitor Management screen appears.

```

17:14:52          **** ENTIRE OUTPUT MANAGEMENT ****          2003-05-16
User ID BRY          - Monitor Management -

                                Status  Idle
                                at 17:14:15 2003-05-16

S Start Monitor
C Close Monitor
L Display Monitor Log
D Display Monitor Log by Date/Time
P Purge Monitor Buffer Pool
E Purge a single Buffer Pool Entry

+-----+
:  -----  Main Task Parameters  -----  :
:  Monitor Node ..... 40          :
:  Minimum Wait ..... 10__      (in seconds) :
:  Maximum Wait ..... 50__      (in seconds) :
:  Wait Increment ..... 5__      (in seconds) :
:  Current Wait ..... 60         (in seconds) :
+-----+

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

```

Special PF Keys

PF Key	Function	Explanation
PF8	Tasks	Display monitor subtask status.
PF10	Wake	Activate the Monitor before the next cycle.

The Monitor Management screen enables the system administrator to start, wake or close the Entire Output Management Monitor manually, display the Monitor Log and purge the Monitor Buffer Pool.

These functions are explained on the following pages.

Field Descriptions

- **Status**

Monitor status. Possible values:

- Closed
 - Purge
 - Idle
 - Monitor not active
 - Process Bundles
 - Process JES Queue
 - Process Printouts
 - Purge expired Archive
 - Purge expired Bundles
 - Purge expired Logs
 - Purge expired Printouts
 - Purge expired Reports
 - Shutdown in progress
- **at**
Time when the Monitor was last active.
 - **Monitor Node**
Node under which Entire Output Management is running.
 - **Minimum Wait**
The **minimum** time in seconds the Monitor is to wait between two consecutive monitoring cycles. You can modify the value that appears here by simply entering a new value and pressing Enter.
 - **Maximum Wait**
The **maximum** time in seconds the Monitor is to wait between two consecutive monitoring cycles. You can modify the value that appears here by simply entering a new value and pressing Enter.
 - **Wait Increment**
The number of seconds by which the wait time increases.
If there is no activity during the minimum wait time, the wait time is increased by this value, until the maximum is reached.
When activity occurs, the wait time returns to the minimum.
You can modify the value that appears here by simply entering a new value and pressing Enter.
 - **Current Wait**
The wait time in effect for the current cycle.

Starting the Monitor

▶ To start the Monitor, the Entire System Server Node specified for start must be active.

- Enter an **S** in the command line and press Enter.

The Monitor status changes (see description for the field Status, above) and a message confirms.

Waking the Monitor

▶ To activate the Monitor before the next scheduled activity cycle, see Wait parameters).

- Press PF10 (Wake) on the Monitor Management screen.

The Monitor is activated.

- When you press Enter again, the **at** field (see previous page) displays the time when the Monitor became active.

If there was any pending work, the Status changes.

When the activity cycle is completed, Monitor status changes back to Idle.

Closing the Monitor

▶ To close the Monitor

- Enter a **C** in the command line of the Monitor Management screen and press Enter.

A window opens that asks you to confirm by typing SHUTDOWN in the field provided:

```

17:14:52          **** ENTIRE OUTPUT MANAGEMENT ****          2003-05-16
User ID BRY          - Monitor Management -

                                Status  Idle
                                at  17:14:15  2003-05-16

S Start Monitor
C Close Monitor
L Display Monitor Log
D Display Monitor Log by Date/Time
P Purge Monitor Buffer Pool
E Purge a single Buffer Pool Entry

+-----+
+-----+
!   Confirm by entering SHUTDOWN   !
!                               ==> _____ !
!                               !
!                               !
!   PF3 End                         !
+-----+

Command => C
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help      Exit  Flip                                Tasks      Wake      Menu
    
```

- Enter SHUTDOWN to confirm and press Enter, or press PF3 (Exit) to resume.

The Monitor status changes to Shutdown In Progress.

This means that the Monitor has not yet detected the close, since it is in wait status.

The next time it is active, the Monitor detects the close and performs the normal close. The message in the Status field changes to Closed.

Modifying the Wait Time between Two Monitor Cycles

You can change the default wait time between two monitoring cycles, in order to reflect the load at your site, by modifying the Wait fields:

- when starting the Monitor;
- when the Monitor is already Active;
 - Change the wait parameters by simply entering new values (in seconds) and pressing Enter.

For descriptions of these fields, see Wait Factor.

Displaying Monitor Log

▶ To display the monitor log in descending chronological order (most recent event first):

- Enter **L** in the command line of the Monitor Management screen and press Enter.

A screen appears displaying all Monitor log records, ordered by descending time. Browse log information with PF7 (Up) and PF8 (Down).

▶ To display the monitor log in ascending chronological order (oldest event first):

- Enter **D** in the command line of the Monitor Management screen and press Enter.

A screen appears displaying all Monitor log records, ordered by ascending time. Browse log information with PF7 (Up) and PF8 (Down).

- You can display more information about a log entry by entering the IN line command in the two-character command line preceding the entry and pressing Enter.

A user that is a non-administrator may also Display Log information via the profile setting "Display Monitor" set to **Y** on the User Profile Definition screen. This enables them to only display log information in the system administration sub-system using option 6 "Monitor Start/Close".

Note:

Sometimes errors require user intervention. The monitor will try to re-execute its tasks each monitor cycle. To reduce logging during such transient error situations, repeated identical log messages will be automatically suppressed using the following scheme:

- Identical messages 1 to 9 are written to monitor log as usual;
- Message 10 is preceded by a warning, that future identical messages will be suppressed;
- Next identical messages that are written to log (reminders) are 20, 30, 40, 100, 200, 300, 1000, 2000, 3000, ;
- Suppression of duplicates is reset whenever the monitor task is restarted. In addition, duplicates are not suppressed, if there is a delay of 23 hours (or more) between occurrences.
- No parameter settings are needed to influence suppression.

For further details, see the subsection LO - Display Log Information for an Object and Log Display screen of the Entire Output Management System Programmer's Documentation.

Purging Monitor Buffer Pool

▶ **To purge the monitor buffer pool**

- Enter **P** in the command line of the Monitor Management screen and press Enter.

All entries in the Natural Buffer Pool are purged.

Purging a Single Buffer Pool Entry

- Purge Monitor Buffer Pool Window
- Field Descriptions

▶ **To purge a single buffer pool entry**

- Enter **E** in the command line of the Monitor Management screen and press Enter.

The Purge Monitor Buffer Pool window opens:

Purge Monitor Buffer Pool Window

```

17:21:44          **** ENTIRE OUTPUT MANAGEMENT ****          2003-05-16
User ID BRY          - Monitor Management -

                                     Status Idle
                                     at 17:21:19 2003-05-16

S Start Monitor
C Close Monitor  +-----+
L Display Monitor ! Purge Monitor Buffer Pool !
D Display Monitor !
P Purge Monitor B ! Library .. _____ !
E Purge a single ! Object ... _____ !
                  ! DBID ..... _____ !
                  +-----+ ! FNR ..... _____ ! +-----+
: --- ! ! +-----+
: Mon ! !
: Min ! PF3 End ! in seconds) :
: Max +-----+ in seconds) :
: Wait Increment ..... 5____ (in seconds) :
: Current Wait ..... 60 (in seconds) :
+-----+

Command => E
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help      Exit Flip                      Tasks      Wake      Menu
    
```

- Enter data for the object to be purged as described below and press Enter.

Only the object you specify here is purged from the Monitor Buffer Pool.

Field Descriptions

- **Library**
Enter the name of the library where the object to be purged is located.
- **Object**
Enter the name of the object to be purged.

- **DBID**
Enter the ID of the data base where the object to be purged is located.
- **FNR**
Enter the file number of the object to be purged.

Monitor Task Management

```

17:23:28          **** ENTIRE OUTPUT MANAGEMENT ****          2003-05-16
  UserId UKSJU          - Monitor Task Management -

  Cmd  #  ----- Task Status ----- Action   Last Active          Wait Factors
                                     Min   Max  Incr  Curr

  _  01  Idle                                     M     2003-07-24 17:23:26  30_ 120_ 10_ 30
  _  02  Process SPOOL Queue                     S     2003-07-24 17:23:28  60_ 300_ 30_ 60
  _  03  Idle                                     C     2003-07-24 17:23:28 120_ 3600 120 120
  _  04  Process Bundles                         R     2003-07-24 17:23:28  30_ 180_ 10_ 30
  _  05  Idle                                     P     2003-07-24 17:23:28  40_ 240_ 20_ 40

Action values : M Main task, S Scan source queues, C Copy to container,
                R Create reports/bundles, P Manage printouts

Valid commands: C Close, W Wake, P Purge buffer, E Purge single, L Display log

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

This screen shows the current status of the monitor subtasks. The meaning of the columns is:

Column	Explanation	
#	Task number 01 to 05	
Task Status	Current task status	
Action	Processing performed by this task	
Last Active	Date and time the task was last active	
Wait Factors	The Minimum, Maximum, Increment and Current wait times for this task. These values (except current) may be modified by pressing PF8 and overtyping with the required new value.	
Cmd	Line command, which may take one of the following values:	
	C	Close the task. If you close task 1, all subtasks will be closed. For any other subtask, task 1 will take over its work.
	W	Wake the task to perform its processing cycle.
	P	Purge the Natural buffer pool of the task.
	E	Purge a single object from the Natural buffer pool of the task.
L	Display log entries for the task.	

Start Archiving Task

This subsection covers the following topics:

- Initiate Start of Archiver
- Field Descriptions

Initiate Start of Archiver

The Automatic Archiving defaults start Archiving automatically, but the system administrator can also start Archiving manually with Start Archiving Task.

▶ To start the Archiving Task manually

- Enter **7** on the command line of the System Administration Menu and press Enter.

The following window opens:

```

12:44:43          **** Entire Output Management ****          15/11/1999
User ID GHH          - System Administration -

Maintenance Functions

  1 System Defaults
  2 Users
  3 Copy NATURAL SECUR +-----+
  4 Calendars          !           - Initiate Start of Archiver -           !
  5 Physical Printers !           Scheduled next at .. 00-01-02  00:00           !
                                     !           Reschedule for ..... 00-11-15  12:44           !
Control Functions      !           !
                                     !           !
  6 Monitor Start/Clos !   PF3 Exit                                     !
  7 Start Archiving Ta +-----+
  8 Start Reviving Task
  9 Start Condense Task

10 Transfer Entity

Please select option.
Command => 7_____
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help           Exit Flip                                     Menu

```

Field Descriptions

- **Scheduled next at**
This is the next starting date and time according to the Archiving Schedule.
- **Reschedule for**
The present date and time are displayed here. You can change these values.

All Reports marked for archiving are written to the archiving medium.

Note:

If the Report to be archived is **in use**, for example, if it is in the Printout queue or in an open Bundle, then it is not archived at this time, but only when printing is finished or the Bundle closed and the next Archiving session has begun.

For further information on Archiving, see the subsection Automatic Archiving Defaults and the section Archive Administration.

Start Reviving Task

This subsection covers the following topics:

- Initiate Start of Reviver
- Field Descriptions

Initiate Start of Reviver

Start Reviving Task enables the system administrator to revive archived Reports.

▶ To start the Reviving task

- Enter **8** on the command line of the System Administration Menu and press Enter.

The following window opens:

```

12:46:28          **** Entire Output Management ****          15/11/1999
User ID GHH          - System Administration -

Maintenance Functions

  1 System Defaults
  2 Users
  3 Copy NATURAL SECUR +-----+
  4 Calendars          !           - Initiate Start of Reviver -           !
  5 Physical Printers !           Scheduled next at .. 1999-11-15  14:00           !
                                     !           Reschedule for ..... 1999-11-15  12:46           !
Control Functions      !           !
                                     !           !
  6 Monitor Start/Clos !   PF3 Exit                                     !
  7 Start Archiving Ta +-----+
  8 Start Reviving Task
  9 Start Condense Task

10 Transfer Entity

Please select option.
Command => 8
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
          Help           Exit Flip                                     Menu

```

Field Descriptions

- **Scheduled next at**
This is the next starting date and time according to the Reviving Schedule.
- **Reschedule for**
The present date and time are displayed here. You change these values.

All Reports marked for reviving appear on the Active Reports screen.

Start Condense Task

This subsection covers the following topics:

- Initiate Start of Condense
- Field Descriptions

Initiate Start of Condense

Start Condense Task enables the system administrator to condense one or more marked Archive Data Sets.

▶ To start the Condense task

- Enter **9** on the command line of the System Administration Menu and press Enter.

The following window opens:

```

11:11:29          **** Entire Output Management ****          17/01/1999
User ID GHH          - System Administration -

Maintenance Functions

  1 System Defaults
  2 Users
  3 Copy NATURAL SECUR +-----+
  4 Calendars          !           - Initiate Start of Condense -           !
  5 Physical Printers !           Scheduled at ..... 2000-01-02 00:00           !
                                !           Reschedule for ..... 1999-01-17 11:11           !
Control Functions      !           !           !
                                !           !           !
  6 Monitor Start/Clos !   PF3 Exit           !
  7 Start Archiving Ta +-----+
  8 Start Reviving Task
  9 Start Condense Task

 10 Transfer Entity

Please select option.
Command => 9_____
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
          Help           Exit Flip                                     Menu

```

Field Descriptions

- **Scheduled at**
This is the next starting date and time.
- **Reschedule for**
The present date and time are displayed here. You can change these values to reschedule the next condense task.

Using NOP to Schedule NOM Jobs

This subsection covers the following topics:

- Scheduling Archive and Revive Jobs
- What is NOMSCHED?
- Input Parameters
- Output Conditions

Scheduling Archive and Revive Jobs

Entire Output Management uses batch Natural jobs to archive and revive active reports. These batch jobs may be scheduled by Entire Output Management or by Entire Operations. You may prefer to schedule them via Entire Operations if, for example, you wish to:

- integrate them into your standard housekeeping networks;
- ensure that prerequisites (such as tape drives) are available before submitting them.

This section explains how to use Entire Operations to schedule the archive and revive jobs.

What is NOMSCHED?

NOMSCHED is a batch Natural program in library SYSNOM. It should be executed as an Entire Operations job of type JOB, which submits a standard batch Natural job. The Natural parameters must include the correct LFILE definitions for Entire Operations, the SAT log file and, if used, the Entire Output Management active data file. The Natural CMSYNIN should contain:

```
LOGON SYSNOM
NOMSCHED @P-OWNER @P-NETWORK @P-RUN @P-JOB ESY-node NOM-dbid NOM-fnr func
FIN
```

(The input parameters to NOMSCHED are explained below.)

Assuming that NOMSCHED runs to successful completion, then the next time the Entire Output Management monitor wakes up, it will submit an archive or revive job as appropriate. This means that successful completion of NOMSCHED implies only that the archive or revive will be submitted, not that it has run.

Input Parameters

```
NOMSCHED @P-OWNER @P-NETWORK @P-RUN @P-JOB ESY-node NOM-dbid NOM-fnr func
```

Note:

The @ should be replaced with one of your Entire Operations escape characters.

Parameter	Explanation
P-OWNER P-NETWORK P-RUN P-JOB	These are predefined Entire Operations symbols containing the owner, network, run number and job.
<i>ESY-node</i>	Specifies the Entire System Server node ID where the Entire Output Management monitor runs.
<i>NOM-dbid</i> <i>NOM-fnr</i>	Specify the database ID and file number of the Entire Output Management system file (Ifile 206).
<i>func</i>	Specifies ARC to schedule the archive job or REV to schedule the revive job.

Output Conditions

NOMSCHEM sets an output condition for the specified owner, network and run number in the format:

NOM-<nnn>--<function>--<result>

where:

- <nnn> is the monitor node ID;
- <function> is ARC or REV;
- <result> is OK or NOK.

Note:

Neither condition will be set, if there is an error in the input parameters.

Long Records

Note:

NPR321 is a pre-requisite for long record support.

- How It Works
 - Container File Format
 - Restrictions
 - Separation Exits
 - Considerations when Migrating
-

How It Works

Initially, long records are only supported for JES2 spool-files. To enable long record support, you must define a long record container file in Monitor Defaults (the container file fields are only visible if the spool type is JES2). Once you have done this, you can specify on a report definition's JES identification that this report is derived from a spool file containing long records (this field only becomes visible when a long record container dbid and fnr have been defined).

When the monitor scans the JES queues, any spool file which would cause the creation of a long record report is copied into the defined container file and all subsequent processing is performed on the copy in the container file. By default, the original spool file will not be cleaned up by NOM unless Automatic Cleanup defaults specifies **Y** for Spool Cleanup and for Long records (the latter is only visible if a long record container file has been defined).

Container File Format

The long records are segmented into 124-byte segments, so that, even if a segment contains 124 X'01's, it can still be compressed and decompressed correctly. The format of each segment is:

Segment length	I2
Last segment indicator	A1 - blank in all segments except the last, when it is Y
Compressed segment data	A248

Restrictions

- Long record reports may can be printed to printers, which use RMPRWKF as the print program (SYSPRJES, DISKMVS, TAPEMVS).
- Printer exits are not invoked for long record reports.
- If a normal report is created from the same spool file as a long record report, the normal report will also be based on the segmented copy, but it will not be reconstituted at print time, because NOM does not recognize that it is a long record report.
- The logical printer attributes should be set so that NOM can print the long record report - that is lrecl, blksize and recfm must be appropriate. If the logical printer is defined as fixed record, NOM prints each record with an lrecl of 32760.

Separation Exits

Separation exits are invoked for long record reports. However, instead of a record at a time being passed, a segment at a time is passed. This means that the separation exit needs to be sensitive to the data format. For example:

- When inserting records, the exit is really inserting segments, so it must set the segment length and the last segment indicator.
- When suppressing records, the exit is really suppressing segments, so it should ensure that suppression begins with the first segment of a record and continues until the last segment of the record.

There is an example exit in SYSNOMS(SJULONGX) which inserts lines into a long record report.

Considerations when Migrating

When a report defined as containing long records is migrated, the long record flag is not copied over, because NOM does not know if a long record container file is defined in the target environment.

If the long record container dbid and fnr are subsequently deleted, any report which has long records set to **Y** cannot be processed correctly at active report creation time (existing active reports are ok). The following error message is written to the NOM log:

```

                                Display Log Message

Message ... NOM1112 Long Record Container File not defined
User ID ... MAIN
Code ..... MO
Object .... UKSJU-LONG-RECORDS/UKSJULNG/53078/SO/2
Date ..... 2002-11-08
Time ..... 16:26:26
Report ....                               Number ..
Bundle ....                               Number ..
Job name ..                               Number ..
Printer ...
```

And the following is written to the monitor output:

```

RMSCJES2 2002-11-08 16:26:26 Invalid long record container file    0    0
UKSJU-LONG-EXIT/UKSJULNG/53078/SO/2
```

Archive Administration

This section covers the following topics:

- Archive Data Sets
- Listing Archive Data Sets
- Condensing an Archive Data Set
- Deleting an Archive Data Set
- Listing VOLSERS spanned by an Archive Data Set
- Listing Reports in an Archive Data Set
- Modifying Expiration Date of a Report in an Archive Data Set
- Resetting Expiration Date of a Report in an Archive Data Set
- Deleting a Report from an Archive Data Set
- Reviving a Report Deleted from Active Reports

For further information about Archiving, see the subsections Automatic Archiving Defaults and Start Archiving Task in the Section System Administration.

Archive Data Sets

Every time Reports are archived to a tape, a data set is created on the tape volume containing all the archived Reports. This is called an Archive Data Set.

For each Archive Data Set, an entry is made on the Entire Output Management archive catalog, which contains control information regarding each archive process.

This information includes the date and time of the operation, the VOLSER(s) on which the Archive Data Set has been catalogued, and an indication of whether the data set still contains Reports which must remain on archive.

When the Reports contained in an Archive Data Set are no longer required, a message is displayed to the right of the data set indicating that the VOLSERS can be reused for other purposes.

Listing Archive Data Sets

- Special PF Keys
- Available Line Commands
- Column Headings

To display the list of data sets which have been archived

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

The **first** Archive Data Sets screen appears:

```

17:31:17          **** ENTIRE OUTPUT MANAGEMENT ****          2003-03-18
User ID BRY          - Archive Data sets -

Cmd Data set          NVol  NumRp  Created          Msg
-----
___ NOM.ARC221.NOM0402          1      1  03-03-03 09:00
___ NOM.ARC221.NOM0401          1          02-12-23 09:00 can be deleted
___ NOM.ARC221.NOM0400          1          02-12-18 14:17 can be deleted
___ NOM.ARC221.NOM0399          1          02-12-18 13:39 can be deleted
___ NOM.COND221.NOM0398          1          02-11-11 11:05 can be deleted
___ NOM.ARC221.NOM0397          1          02-11-11 09:00 can be deleted
___ NOM.ARC221.NOM0396          1          02-11-08 10:19 can be deleted
___ NOM.ARC221.NOM0393          1          02-11-05 11:05 can be deleted
___ UKSJU.NOMUDA.NOM0392          1      11  02-11-01 16:10
___ RDU.SJU.NOMUDA3.NOM0391          1          02-11-01 16:10 can be deleted
___ NOM.ARC221.NOM0390          1          02-11-01 16:10 can be deleted
___ NOM.ARC221.NOM0389          1          02-11-01 09:00 can be deleted
___ RDU.SJU.NOMUDA3.NOM0388          1          02-10-31 09:00 can be deleted
___ RDU.SJU.NOMUDA3.NOM0387          1          02-10-30 09:00 can be deleted
___ NOM.ARC221.NOM0386          1          02-10-02 09:00 can be deleted
Top Of Data
Command => _____
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help      Exit  Flip          -      +          <      >      Menu
    
```

The list is displayed in alphabetical order.

Special PF Keys

PF Key	Function	Explanation
PF10	<	Display previous screen.
PF11	>	Display next screen.

Available Line Commands

Code	Function
CD	Mark data set for condensing.
DE	Delete the data set from archive. Un-catalogs this data set.
RP	List the Reports archived on this data set.
VO	List the VOLSERS on which this data set resides.

Column Headings

- **Cmd**
Enter a two-character line command.
- **Data Set**
The archived data set name.
- **NVol**
The number of tape volumes the data set occupies.
- **NumRp**
The number of archived Reports contained on the data set.
- **Created**

The date and time the data set was created.

- **Msg**

When all Reports archived on the data set are no longer required and have been purged, the message Delete appears, advising you that the data set can be uncataloged and the VOLSERS reused.

▶ **To display the second of the Archive Data Sets screen**

- Press PF11:

```

17:32:08          **** ENTIRE OUTPUT MANAGEMENT ****          2003-03-18
User ID BRY          - Archive Data sets -

Cmd Data set          NVol  NumRp  Created          LogExpD  PhysExpD
-----
___ NOM.ARC221.NOM0402          1      1 03-03-03 09:00 03-09-03 03-09-03
___ NOM.ARC221.NOM0401          1      1 02-12-23 09:00 03-01-13 03-01-13
___ NOM.ARC221.NOM0400          1      1 02-12-18 14:17 03-01-07 03-01-07
___ NOM.ARC221.NOM0399          1      1 02-12-18 13:39 03-01-07 03-01-07
___ NOM.COND221.NOM0398          1      1 02-11-11 11:05 02-11-28 02-11-28
___ NOM.ARC221.NOM0397          1      1 02-11-11 09:00 02-12-01 02-12-01
___ NOM.ARC221.NOM0396          1      1 02-11-08 10:19 02-11-28 02-11-28
___ NOM.ARC221.NOM0393          1      1 02-11-05 11:05 02-11-25 02-11-25
___ UKSJU.NOMUDA.NOM0392          1     11 02-11-01 16:10 03-11-01 03-11-01
___ RDU.SJU.NOMUDA3.NOM0391          1      1 02-11-01 16:10 02-11-21 03-05-01
___ NOM.ARC221.NOM0390          1      1 02-11-01 16:10 02-11-21 02-11-21
___ NOM.ARC221.NOM0389          1      1 02-11-01 09:00 02-11-21 02-11-21
___ RDU.SJU.NOMUDA3.NOM0388          1      1 02-10-31 09:00 02-11-20 03-04-30
___ RDU.SJU.NOMUDA3.NOM0387          1      1 02-10-30 09:00 02-11-19 03-04-30
___ NOM.ARC221.NOM0386          1      1 02-10-02 09:00 02-10-22 02-10-22
Top Of Data
Command =>
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help      Exit  Flip          -      +          <      >      Menu
    
```

- **LogExpD**

Logical Expiration Date. This is the date until which the data set is to be kept.

This can differ from the Physical Expiration Date, below, if the expiration date of one or more Active Reports is extended or shortened after archiving.

If the Logical Expiration Date is **later** than the Physical Expiration Date, the line with the Archive Data Set is **highlighted**.

Run a condense to synchronize the two dates.

- **PhysExpD**

Physical Expiration Date. This is the date until which the tape is to be kept and corresponds to the date supplied on the tape with the EXPDT parameter.

▶ **To display the third screen of the Archive Data Sets screens**

- Press PF11:

```

17:33:54          **** ENTIRE OUTPUT MANAGEMENT ****          2003-03-18
User ID BRY          - Archive Data sets -

Cmd Data set          NVol  NumRp  Created          # Expired          Cdns
-----
___ NOM.ARC221.NOM0402          1          1 03-03-03 09:00          -----
___ NOM.ARC221.NOM0401          1          02-12-23 09:00          1
___ NOM.ARC221.NOM0400          1          02-12-18 14:17          1
___ NOM.ARC221.NOM0399          1          02-12-18 13:39          1
___ NOM.COND221.NOM0398          1          02-11-11 11:05          N/A          Y
___ NOM.ARC221.NOM0397          1          02-11-11 09:00          40
___ NOM.ARC221.NOM0396          1          02-11-08 10:19          11
___ NOM.ARC221.NOM0393          1          02-11-05 11:05          8
___ UKSJU.NOMUDA.NOM0392          1          11 02-11-01 16:10
___ RDU.SJU.NOMUDA3.NOM0391          1          02-11-01 16:10          10
___ NOM.ARC221.NOM0390          1          02-11-01 16:10          84
___ NOM.ARC221.NOM0389          1          02-11-01 09:00          1
___ RDU.SJU.NOMUDA3.NOM0388          1          02-10-31 09:00          1
___ RDU.SJU.NOMUDA3.NOM0387          1          02-10-30 09:00          2
___ NOM.ARC221.NOM0386          1          02-10-02 09:00          1

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

- **# Expired**

The number of expired reports. This is calculated by subtracting the number of reports still active on this dataset from the number of reports originally archived.

Note: This number will not be displayed for old archive datasets.

- **Cdns**

This shows whether this archive is output from a condense or not.

 **To display the fourth and final screen of the Archive Data Sets screens**

- Press PF11:

```

17:34:13          **** ENTIRE OUTPUT MANAGEMENT ****          2003-03-18
User ID BRY          - Archive Data sets -

Cmd Data set          NVol  NumRp  Created          Arc Type          Num
-----
___ NOM.ARC221.NOM0402          1          1 03-03-03 09:00 Standard
___ NOM.ARC221.NOM0401          1          1 02-12-23 09:00 Standard
___ NOM.ARC221.NOM0400          1          1 02-12-18 14:17 Standard
___ NOM.ARC221.NOM0399          1          1 02-12-18 13:39 Standard
___ NOM.COND221.NOM0398          1          1 02-11-11 11:05 Standard
___ NOM.ARC221.NOM0397          1          1 02-11-11 09:00 Standard
___ NOM.ARC221.NOM0396          1          1 02-11-08 10:19 Standard
___ NOM.ARC221.NOM0393          1          1 02-11-05 11:05 Standard
___ UKSJU.NOMUDA.NOM0392          1         11 02-11-01 16:10 ARCTEST4          4
___ RDU.SJU.NOMUDA3.NOM0391          1          1 02-11-01 16:10 ARCTEST3          3
___ NOM.ARC221.NOM0390          1          1 02-11-01 16:10 Standard
___ NOM.ARC221.NOM0389          1          1 02-11-01 09:00 Standard
___ RDU.SJU.NOMUDA3.NOM0388          1          1 02-10-31 09:00 ARCTEST3          3
___ RDU.SJU.NOMUDA3.NOM0387          1          1 02-10-30 09:00 ARCTEST3          3
___ NOM.ARC221.NOM0386          1          1 02-10-02 09:00 Standard

Top Of Data
Command =>
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help          Exit  Flip          -    +          <    >    Menu
    
```

- **Arc Type**
Displays the archive type name, standard or user-defined.
- **Num**
Internally allocated number for archive type.

Condensing an Archive Data Set

 **To mark an Archive Data Set for condensing**

- Enter CD in the two-character command line preceding the data set(s) to be condensed and press Enter.

The message condense appears in the Msg column:

```

14:41:22          **** ENTIRE OUTPUT MANAGEMENT ****          2000-11-13
User ID GHH          - Archive Data sets -

Cmd Data set          NVol  NumRp  Created          Msg
-----
___ NOM.ARC.NOM0056          1         60 13/10/99 13:48 condense
___ NOM.ARC.NOM0055          1         13 13/10/99 13:42 condense
___ NOM.ARC.NOM0054          1          1 22/09/99 15:03 can be deleted
___ NOM.ARC.NOM0051          1          1 22/09/99 14:50 can be deleted
___ NOM.ARC.NOM0050          1          1 20/09/99 11:38 can be deleted
___ EOM.ARC.NOM0049          1          1 20/08/99 14:35 can be deleted
___ EOM.ARC.EOM0047          1          1 12/08/99 15:45 can be deleted
    
```

▶ To start the condense task

- Issue the direct command START CONDENSE from the command line of any screen (see START command in the Entire Output Management Reference Documentation) or select option 9 on the System Administration Menu (see the subsection Start Condense Task in this documentation).

Note:

The job skeleton used for condensing has to be saved in library SYSNOMU and must be named 'JCDNSKEL'.

Deleting an Archive Data Set

An archive data set can only be deleted when it contains no reports.

▶ To delete an archive data set

- On the Archive Data Sets screen, enter DE in the two-character command line preceding the data set you want to delete and press Enter.

A window opens which asks you to confirm deletion by typing DELETE and specifying whether or not the data set is to be uncatalogued.

A message confirms:

Object deleted

Listing VOLSERS Spanned by an Archive Data Set

- Special PF Keys: VOLSERS

▶ To display the list of VOLSERS spanned by an Archive Data Set

- Enter VO in the two-character command line preceding the appropriate data set and press Enter.

The VOLSERS window opens:

```

14:58:55          **** ENTIRE OUTPUT MANAGEMENT ****          2000-11-13
User ID GHH          - Archive Data sets -

Cmd Data set          NVol NumRp Created          Msg
-----
___ NOM.ARC.NOM0056    +-----+
___ NOM.ARC.NOM0055    !          VOLSERS          !
___ NOM.ARC.NOM0054    !          !          ! an be deleted
___ NOM.ARC.NOM0051    !          NOM011          ! an be deleted
___ NOM.ARC.NOM0050    !          !          ! an be deleted
___ EOM.ARC.NOM0049    !          !          ! an be deleted
vo EOM.ARC.EOM0047    !          !          ! an be deleted
___ EOM.ARC.EOM0046    !          !          ! an be deleted
___ EOM.ARC.EOM0044    !          !          ! an be deleted
___ EOM.ARC.EOM0042    ! PF3 Exit PF7 Up PF8 Down ! an be deleted
___                    !          !          !
___                    +-----+
___
___
___
All
Command =>
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help      Exit Flip      -      +      <      >      Menu
    
```

Special PF Keys: VOLSERS

PF Key	Function	Explanation
PF7	-	Scroll list up .
PF8	+	Scroll list down .

Listing Reports in an Archive Data Set

- Available Line Commands
- Column Headings

 **To display the list of Reports contained in an Archive Data Set**

- Enter RP in the two-character command line preceding the appropriate data set and press Enter.

If long report and bundle names are displayed by the system (see settings in System Defaults and Adding a User Profile), the Reports in Archive Data Set screen takes the following form:

```

17:57:36          **** ENTIRE OUTPUT MANAGEMENT ****          2000-11-15
User ID GHH          - Reports in Archive Data Set -

Archive Data Set .... NOM.COND211.NOM0081
Cmd Report          Run-No   ExpDate   OrigExp   Status
-----
___ EOM-ARCHIVER    19519   2000-11-20
___ EOM-ARCHIVER    19520   2000-11-20
___ EOM-ARCHIVER    19521   2000-11-20
___ EOM-ARCHIVER    19523   2000-11-20
___ EOM-ARCHIVER    19524   2000-11-20
___ EOM-ARCHIVER    19525   2000-11-20
___ EOM-ARCHIVER    19567   2000-11-20
___ EOM-ARCHIVER    19568   2000-11-20
___ EOM-ARCHIVER    20286   2000-11-20
___ EOM-REVIVER     19522   2000-11-20
___ EOM-REVIVER     20287   2000-11-20
___ PWR-EMPL-STD3-D 20365   2000-11-20
___ PWR-EMPL-STD3-D 20437   2000-11-20
___ PWR-EMPL-STD3-D 20588   2000-11-20
Top Of Data
Command => _____
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help      Exit Flip          -      +      Ext      Menu
    
```

By pressing PF9 (Ext), you can toggle to short names display.
 Then the Reports in Archive Data Set screen will take the following form:

```

17:58:42          **** ENTIRE OUTPUT MANAGEMENT ****          2000-11-15
User ID GHH          - Reports in Archive Data Set -

Archive Data Set .... NOM.COND211.NOM0081
Cmd Report          Run-No   ExpDate   OrigExp   Status
-----
___ EOM-ARCHIVER    19519   2000-11-20
___ EOM-ARCHIVER    19520   2000-11-20
___ EOM-ARCHIVER    19521   2000-11-20
___ EOM-ARCHIVER    19523   2000-11-20
___ EOM-ARCHIVER    19524   2000-11-20
___ EOM-ARCHIVER    19525   2000-11-20
___ EOM-ARCHIVER    19567   2000-11-20
___ EOM-ARCHIVER    19568   2000-11-20
___ EOM-ARCHIVER    20286   2000-11-20
___ EOM-REVIVER     19522   2000-11-20
___ EOM-REVIVER     20287   2000-11-20
___ PWR-EMPL-STD3-D 20365   2000-11-20
___ PWR-EMPL-STD3-D 20437   2000-11-20
___ PWR-EMPL-STD3-D 20588   2000-11-20
Top Of Data
Command => _____
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help      Exit Flip          -      +      Ext      Menu
    
```

Names of Reports deleted from Active Reports are marked with an asterisk (*).

Available Line Commands

Code	Function
DE	Delete Report from Archive.
MO	Modify expiration date.
RS	Reset expiration date to original value.
RV	Revive Report deleted from Active Reports.

Column Headings

- **Cmd**
Enter a two-character line command.
- **Report**
The name of the Report archived.
- **Run-No**
Unique number identifying the Report.
- **ExpDate**
Expiration date. The date until which the Report is to be kept.
- **OrigExp**
Original expiration date until which the Report was to be kept.
(If the original value of ExpDate has been modified or deleted)
- **Status**
Report status.

Modifying Expiration Date of a Report in an Archive Data Set

- Field Descriptions



To modify the expiration data of a report in an Archive Data Set

- On the Reports in Archive Data Set screen, enter MO in the two-character command line preceding the Report in the data set you want to modify and press Enter.

The Modify Expiration Date window opens:

```

18:02:54          **** ENTIRE OUTPUT MANAGEMENT ****          2000-11-15
User ID FHI          - Reports in Archive Data Set -

Archive Data Set .... NOM.COND211.NOM0081
Cmd Report

-----+-----+-----+
| EOM-ARCHIVER      | !           - Modify Expiration Date -           | !
| EOM-ARCHIVER      | !                                           | !
| EOM-ARCHIVER      | ! Report ..... EOM-ARCHIVER01 / 18174           | !
| MO EOM-ARCHIVER01 | ! Expiration Date ..... 2000-12-31               | !
| EOM-ARCHIVER02    | ! OrigExp Date ..... 2000-10-31                 | !
| EOM-ARCHIVER04    | !                                           | !
| EOM-ARCHIVER05    | ! New Expiration Date . 2000-12-31               | !
| EOM-ARCHIVER06    | !                                           | !
| EOM-ARCHIVER07    | !                                           | !
| EOM-ARCHIVER08    | ! PF3 = Exit                                     | !
| EOM-ARCHIVER09    | +-----+-----+-----+                       | +
| EOM-ARCHIVER11    |           18183  2000-12-31  2000-10-31         |
| EOM-ARCHIVER12    |           18184  2000-12-31  2000-10-31         |
| EOM-ARCHIVER13    |           18185  2000-12-31  2000-10-31         |
+-----+-----+-----+
Top Of Data
Command => _____
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help  Exit  Flip                -      +      Ext                Menu

```

▶ To modify the expiration date

- Enter a new value in the New Expiration Date field and press Enter.

Field Descriptions

- **Report**
The Report name.
- **Expiration Date**
The current expiration date. This can differ from the Original Expiration Date.
- **OrigExp Date**
This is the first valid expiration date.
If the original date has already been modified, the original date appears here and the current expiration date appears in the Expiration Date field.
- **New Expiration Date**
Enter the new expiration date here.

Resetting Expiration Date of a Report in an Archive Data Set

▶ To reset the expiration date of a Report in an Archive Data Set

- Enter RS in the two-character command line preceding the data set to be reset and press Enter.

The expiration date of the Report is reset to the original expiration date.

Deleting a Report from an Archive Data Set

▶ To mark a Report in an Archive Data Set for deletion

- Enter DE in the two-character command line preceding the Report to be deleted and press Enter.

The letter **D** appears in the Status column following the Report selected and the Report's Expiration Date (ExpDate) changes to the current date.

Reports marked with **D** are automatically deleted on the following day.

Reviving a Report Deleted from Active Reports

If an archived Report was deleted from Active Reports manually, but not deleted from the Archive, the Report is marked with a **D** on the Reports in Archive Data Set screen.

Reports marked with **D** are automatically deleted on the following day.

▶ To revive an archived Report deleted from Active Reports

1. First reset the Report's expiration date with the RS line command as described above.
2. Then enter RV in the two-character command line preceding the Report name and press Enter.

The following window opens:

```

18:16:02          **** ENTIRE OUTPUT MANAGEMENT ****          2000-11-15
User ID GHH              - Reports in Archive Data Set -
Archive Data Set .... NOM.ARC211.NOM0087
Cmd Report              Run-No   ExpDate      OrigExp      Status
-----
__ UKSJU-REP-001114      +-----+
__ UKSJU-REP-001114      !           Revive Report From Archive      !
__ UKSJU-REP-001114      !           UKSJU-REP-001114                  !
RV UKSJU-REP-001114      !                                           !
__ UKSJU-REP-001114      !           Revive to                          !
__ UKSJU-REP-001114      !           S Spool                            !
__ UKSJU-REP-001114      !           D Data base                         !
__ UKSJU-REP-001114      !           C Connect                          !
__ UKSJU-REP-001114      !                                           !
__ UKSJU-REP-001114      ! Select => S                                !
__ UKSJU-REP-001114      ! Bundle => _____                       !
__ UKSJU-REP-001114      !                                           !
__ UKSJU-REP-001114      ! PF3 Exit                                    !
__ UKSJU-REP-001114      +-----+
Top Of Data
Command =>
DE delete MO modify RS reset RV revive
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help      Exit  Flip      -      +      Ext      Menu
    
```

3. Enter **S** to revive the Report to the SPOOL, **D** for the Entire Output Management data base or **C** to revive to Con-nect. Press Enter.

The letter you select here then appears on the Active Report List screen (see the Section Active Reports and Folders of the Entire Output Management Reference Documentation) in the **R** column following the revived Report (see also the explanation for the R column). The Report is marked for the next scheduled reviving (see Reviving Parameters).

If you enter the name of the bundle the report is added to an open active bundle at revive time. If there is no open active bundle, one is created if a master bundle with the same name exists.

If there is no master bundle of the given an error message will be displayed.

Printer Exits, User Separation Routines, Separator Pages

This section covers the following topics:

- Printer Exits
 - User Separation Routines
 - Separator Pages
-

Printer Exits

- Printer Exit Interface

If a Printer Exit is specified in the Logical Printer definition, control is passed to this exit at print time for each record to be printed. Here you can insert, modify or suppress records.

Usually a Printer Exit is used to insert escape sequences, so that the printer can select special print styles.

As in the examples PRCANON and PRKYOCER in library SYSNOMS, this could be an escape sequence at the beginning of the Printout to switch to landscape mode.

Ideally, the Printout should contain mnemonics for all kinds of print attributes (i.e. highlighting, underscoring ...) which are translated into escape sequences depending on the Physical Printer to be used. In this way, the Printout is independent of any Physical Printer type.

The Printer Exit must be located in a library defined as STEPLIB to the library SYSNOM.

Printer Exit Interface

Printer Exit	Format	Description
PRT-RC	(B2)	Return code to be set by the exit: 0 = No modification 4 = Record was modified 8 = Record to be inserted 12 = Record to be suppressed 97 = Do not call the exit again until the next report separator start.. On the next call, the exit PRT-WORK will be reset. 98 = Stop printing immediately. 99 = Do not call the exit again, but carry on printing. n = All other codes are reserved for future use. Note: When printing a report 97 and 99 have the same effect.
PRT-RECORD	(A251)	The record to be printed.
PRT-RECNO	(N9)	The current record number.
PRT-FLAG	(A1)	Flag with the following meaning: F = First record M = In the middle of Printout L = Last record
PRT-WORK	(A250)	Work area for the Printer Exit.
PRT-REPORT	(A25)	The name of the Report being printed.
PRT-BUNDLE	(A25)	The name of the Bundle being printed.
PRT-RECFM	(A3)	The record format of the Printout.

User Separation Routines

- How are User Separation Routines coded?
- Examples
- Actions
- Parameter Descriptions
- Source Parameters
- Bundle Parameters
- Report Parameters

A User Separation Routine separates a SYSOUT data set into several Reports.

A new Report starts every time the Routine detects a new value in a predefined line and column location on a SYSOUT page.

This section describes the User Separation Routine interface as well as some examples of supplied User Separation Routines. User Separation Routines determine the contents of a Report. The contents of a Report are a continuous part or parts in one SYSOUT data set.

If User Separation Routines are defined for the Report, they are called for each record in the identified SYSOUT data set. However, the Routine can direct the Monitor to position anywhere else on the SYSOUT data set.

How are User Separation Routines coded?

User Separation Routines are normally coded in the Natural 4GL language, but there are no restrictions on using other languages, as far as they follow the rules for interfacing with the Monitor.

The Routine communicates with the Monitor by means of a parameter data area.

This data area contains various parameters. Some can be modified by the Routine and returned to the Monitor, others are read-only and cannot be modified.

The list of parameters is fixed.

Their format, length, dimensions and position within the list must be followed.

A parameter data area called P-UEXIT is supplied and should be used when coding User Separation Routines.

Examples

Examples of the use of the 'action' parameters described on the following page can be found in the SYSNOMS library.

If you have not done so already (see Adapting to Existing Environment in Installation and Customization), copy the examples to the SYSNOMU library.

You can try these examples by executing the UEXEMPL program in a batch job. Catalog the program first to point to the current employees file.

The TRACE command can subsequently be used for testing.

The following programs are available:

Report	Exit	Description
UEX-ADDFP-OPEN	UEXADP	Separates SYSOUT into several Reports depending on break of main department. Actions: FORW, ADDFP, OPEN
UEX-CREATE	UEXCRE	Separates SYSOUT into several Reports depending on the break of department. Actions: CREATE
UEX-FORW-BACKW	UEXFBT	Forward and backward positioning. Actions: FORW, BACKW, GOTOP, NEXTP
UEX-GO	UEXGGN	Forward and backward positioning. Actions: GOTO, GOTOP, NEXTP.
UEX-UNSL-ADDP	UEXAPI	Replace first line of a page. Actions: INSL, ADDP

Actions

- Miscellaneous Actions
- Positioning Actions
- Inserting Text in a Report
- Including more than one Line in one Routine Call

The following actions may be invoked by a User Exit to influence processing. Each action is based on various parameters which are described below.

Miscellaneous Actions

Action	Description
CACHEON	Enable cacheing of source records. NOM will cache 126 records. This significantly improves performance, if the exit repositions on a page. CACHEON is the default.
CACHEOFF	Disable cacheing of source records.
BUNDLE	Add report to an active bundle.

Positioning Actions

Action	Description
GOTOP	Reposition Monitor to top of current page. The next time the Routine is called, it gets the record at the top of the current page. Page top is detected either by channel 1 ANSI or by machine code.
GOTO	Reposition to record number returned in parameter P-RECNO.
NEXTP	Go to top of next page.
FORW, BACKW	Number of lines in P-RECNO.

Inserting Text in a Report

Action	Description
INSL	Insert up to 10 lines at the current position. The number of lines to be inserted is returned in parameter P-RECNO and the text lines to be inserted are returned in the array parameter P-INSERT-LINES.

Including more than one Line in one Routine Call

Action	Description
ADDR	Add range of lines , where the record number of the range to be included is returned in the parameters P-FROMLINE and P-TOLINE: The next call to the exit starts one line after the last record in the range specified (P-TOLINE + 1).
ADDP	Add all records from the current line until end of current page to the current Report. The next call to the exit starts at the top of the next page.
ADDFP	Add full page . All of the current page is added to the current Report. The next call to the exit starts at the top of the next page.
CREATE	Create Report from a range of record numbers supplied in the P-FROMLINE and P-TOLINE parameters. The Report number to be created must be returned in P-REPNAME. If the Report is not defined in the master data base, it is created dynamically in the master data base using the parameters returned by the exit. When this action is specified and there is an opened Report, the Report is closed first. The next call to the exit starts one line after the last record in the range specified (P-TOLINE + 1).
OPEN	Close current Report and open new Report . The new Report to be opened must be returned in P-REPNAME.
CLOSE	Close current Report . Report Processing parameters can be overwritten, if supplied in the exit parameters.

Parameter Descriptions

- General Parameters

The following is a description of the parameters for User Separation Routines.

General Parameters

Parameter	Description
P-RC	This is a return code which tells whether to include the current record in the Report or not. The return code is returned by the exit to the Monitor and can contain the following values: 0 Include current record in Report 1 Ignore the current record 3 End of processing, close current Report
P-ACTION	This is an action code which tells the Monitor to perform a specific action (see Actions).
P-MASTER	Name of the master or default Report definition currently processed.
P-UPARM1	An array of five parameters supplied by the monitor to the routine. The values are defined in the appropriate master or default Report definitions. Evaluate or save these parameters upon the first call to the exit.
P-RECNO	Current record number within the source being processed.
P-RECORD	Contents of the current record.
P-INSERT-LINES	An array of ten lines which may be inserted with action INSL.
P-FROMLINE	Start record number of a range of lines referenced by actions which add lines to the current active Report.
P-TOLINE	End record number of a range of lines referenced by actions which add lines to the current active Report.
P-WORK	Work area for the user separation routines to save data for subsequent calls.

Source Parameters

- Parameters for Source Type POWER
- Parameters for Source Type JES
- Parameters for Source Type 'Sequential File VSE/ESA'

These parameters are common to all sources.

Parameter	Description
P-SOURCE-TYPE	Indicates the type of source being processed. 1 JES2 2 JES3 3 POWER 4 NOM data base (container file) 5 Sequential file (MVS) 6 Sequential file (VSE) 7 BS2000/OSD 11 Natural Advanced Facilities 14 CMASPOOL
P-SOURCE-CC-TYPE	Indicates the type of carriage control characters. 1 ASA 2 Machine 3 Reserved for BS2000/OSD 4 No carriage control.
P-SOURCE-NUMBER-OF-LINES	Total number of lines in the source.
P-MAXREC	See P-SOURCE-NUMBER-OF-LINES above. This field is still available for compatibility reasons but will be deleted with the next version.
P-SOURCE-RECORD-LENGTH	The current record length in bytes including carriage control characters, if present. It should not be modified.
P-RECLEN	See P-SOURCE-RECORD-LENGTH above. This field is still available for compatibility reasons but will be deleted with the next version.
P-SOURCE-ATTRIBUTES	Source-specific attributes which are redefined depending on P-SOURCE-TYPE are described below.

Parameters for Source Type POWER

Parameter	Description
P-POWER-NODE	Entire System Server node by which the source is being read.
P-POWER-JOB-NAME	The job name of the SYSOUT currently being processed.
P-POWER-JOB-NUMBER	The POWER job number of the SYSOUT currently being processed.
P-POWER-TYPE	Always LS for POWER list queue.
P-POWER-SEGMENTS	Number of segments.
P-POWER-SEG-LASTLINE	An array of up to 40 occurrences indicating the last logical line for each segment.

Parameters for Source Type JES

Fields prefixed with P-JES are reserved for Entire Output Management Version 1.3.2.

Parameters for Source Type 'Sequential File VSE/ESA'

Parameter	Description
P-FVSE-NODE	The Entire System Server node by which the current source is being read.
P-FVSE-VOLSER	The volume serial number on which the file resides.
P-FVSE-DSNAME	The data set name.
P-FVSE-RECFM	The record format of the data set.
P-FVSE-LRECL	The record length of the data set.
P-FVSE-BLKSIZE	The block size of the data set.

Bundle Parameters

These parameters are used to put Reports into Bundles dynamically.

Parameter	Description
P-BUNDLE	An array of up to 5 Bundles into which the Report is put.
P-BUNDLE-COORDINATOR	User-ID of the Bundle coordinator.
P-FLUSH-TIME	Time when the Bundle is to be closed and printed.
P-BUNDLE-FLUSH-LINES	Number of lines at which the bundle is to be closed and printed.
P-BUNDLE-SEPSTART	Bundle start separator.
P-BUNDLE-SEPEND	Bundle end separator.
P-BUNDLE-SEPNO	Number of separator copies.
P-BUNDLE-PRINTER	Printer on which the Bundle is to be printed.
P-BUNDLE-JOBCARDS	Up to 3 job cards used when printing Bundle in batch mode.
P-BUNDLE-GROUP	Up to 5 bundle groups.
P-BUNDLE-SEQUENCE-NR	Up to 5 sequence numbers.
P-BUNDLE-REPORT-SEPARATORS	Bundle report separator.
P-BUNDLE-PRINTERS	Up to 20 bundle printers.
P-BUNDLE-PRINTERS-COPY	Up to 20 bundle printer copies.
P-BUNDLE-HOLD	Bundle hold status.
P-Reserved For Future Use	

Report Parameters

Parameter	Description
P-REPNAME	Used in OPEN and CREATE actions to specify the Report to be opened or created.
P-REPORT-DESCRIPTION	Long description of the Report.
P-OWNER	Master owner of the Report.
P-KEYWORDS	An array of up to 6 keywords which are used when creating the Report or overwriting at close time.
P-STORE-NRM	Y means store Report in Entire Output Management Data Base. Used only when opening or creating new Reports.
P-DISTRIBUTION	An array of up to 10 members for distribution. Used at create and open.
P-STORE-CONNECT	Con-nect cabinet. Used only when opening or creating new Reports.
P-CONNECT-SUBJECT	Document subject in Con-nect.
P-CONNECT-DISTRIBUTION	Con-nect Distribution List. Used only when opening or creating new Reports.
P-PRINTERS	An array of up to 20 Logical Printers to print the Report. Used to overwrite with CREATE, OPEN or CLOSE actions.
P-COPIES	The number of copies of the Report to be printed on each printer specified with P-PRINTERS.

Parameter	Description
P-HOLD	Hold status to queue Printouts. Used to overwrite with CREATE, OPEN or CLOSE actions. Can have the following values: H Hold Printout R Release Printout C Confirm all Users in the distribution to release
P-REPORT-SEPSTART	Report start separator.
P-REPORT-SEPEND	Report end separator.
P-REPORT-SEPNO	Number of separator copies.
P-REPORT-JOBCARDS	Up to 3 job cards used when printing Reports in batch mode.
P-ARCHIVE	Y Report is marked for archiving upon creation.
P-RETENTION-NUM	The number of retention period units the Report contents are available online.
P-RETENTION-UNIT	Retention period unit. W Working days A Absolute days V Weeks M Months.
P-RETENTION-CALENDAR	The name of the calendar used to calculate working days.
P-RETENTION-ACTION	Used to overwrite with CREATE, OPEN or CLOSE actions. P Purge Report after expiration A Archive Report after expiration.

Separator Pages

- Carriage Control Character
- NOP Symbols
- Substitution Variables

Separator Pages can be created for Reports or Bundles. All Separator members containing parameters for the Separator Pages must reside on the Entire Output Management User library, SYSNOMU, as source members. The names of Separator members for Reports must start with an RS- prefix. The names of Separator members for Bundles must start with BS- prefix. Use the Natural editor to create the Separator member.

The Separator member consists of four types of data:

- **Carriage control character**
Entered in the first byte of every line.
Leave this byte empty when no carriage control is required for the line.
- **Text**
Printed as is.
- **Substitution variables**
Starting with @ which are replaced by their current value at print time.
- **NOP symbols**
Starting with @@, replaced by appropriate NOP symbol value at print time.

Carriage Control Character

The first byte on every line of the member is assumed to be a carriage control character (ANSI code). A special control character **K** can be specified in the first byte, to represent BLOCK LETTER character mode.

NOP Symbols

Entered in the form:

```
@@owner.symbol-table.symbol-name
```

for master symbols

or

```
@@owner.symbol-table.symbol-name.network.run
```

for active symbols

where owner, symbol-table, network, run are values of predefined NOP symbols and symbol-name is the name of a defined NOP symbol.

Substitution Variables

The following keywords can be specified as substitution variables anywhere in the text of the Separator member:

Substitution Variable	Description
@REPORT	Report name
@BUNDLE	Bundle name
@DATE	Current date
@TIME	Current time
@CDATE	Report creation or bundle open date
@CTIME	Report creation or bundle open time
@EXIT	Exit name used for separating SYSOUT
@DESCR	Report or bundle description for a separator
@JOBNAME	Job name of SYSOUT
@JOBNO	Job number of SYSOUT
@USER	User ID
@NAME	User name (first and last concatenated)
@DEPTNO	User's department number
@DEPTNAME	Name of User's department
@LOCATION	Location of User's department
@ORGANIZATION	Name of User's organization
@ADDRESS1	User's address, line 1
@ADDRESS2	User's address, line 2
@ADDRESS3	User's address, line 3
@PHONE	User's phone number

Substitution Variable	Description
@COORDINATOR	Coordinator ID
@COORD-NAME	Coordinator name(first and last concatenated)
@COORD-DEPTNO	Coordinator's department number
@COORD-DEPTNAME	Name of Coordinator's department
@COORD-PHONE	Coordinator's phone number
@COORD-LOCATION	Location of Coordinator's department
@COORD-ORGANIZATION	Name of Coordinator's organization
@COORD-ADDRESS1	Coordinator's address, line 1
@COORD-ADDRESS2	Coordinator's address, line 3
@COORD-ADDRESS3	Coordinator's address, line 3

Transferring an Object

This section covers the following topics:

- Transfer Object Facility
- Bundles
- Calendars
- Distribution Lists
- Logical Printers
- Physical Printers
- Reports
- Users

Transfer Object Facility

- How to Use the Transfer Object Facility
- Fields Common to All Screens
- Column Headings Common to All Screens

The Transfer Object facility enables the system administrator to copy objects to a target environment on another data base. This can be particularly useful when copying from a test to a production environment.

To display the Transfer Object facility

- Enter **10** on the command line of the System Administration Menu and press Enter.

The Transfer Object Menu appears.

```

13:07:40          **** ENTIRE OUTPUT MANAGEMENT ****          2000-11-15
User ID GHH          - Transfer Object -

Transfer

  1 Bundle Definitions
  2 Calendar Definitions
  3 Distribution List Definitions
  4 Logical Printer Definitions
  5 Physical Printer Definitions
  6 Report Definitions
  7 User Definitions

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

```

How to Use the Transfer Object Facility

- Objects, which do not already exist are copied to the target environment.
- Related objects must be copied first.
- You can check for related objects with the line command XR.

Fields Common to All Screens

The fields described below are common to all screens of the Transfer Object facility:

- **Source NOM-DB/FILE** Source data base ID and file number **from which** the object is being copied.
- **Target NOM-DB/FILE**
Target data base ID and file number **to which** the object is being copied.

Column Headings Common to All Screens

- **Cmd**
Enter one of the available line commands here.
- **exist**
If **yes** appears, the object exists in the target environment.
If **no** appears, the object does not exist in the target environment.
- **Msg**
Possible values:
 - copied
 - error
 - replaced

Bundles

- Listing Bundles to be Copied
- Copying a Bundle to a Target Environment
- Display Related Objects and Reports for Bundle

Listing Bundles to be Copied

- Column Headings
- Available Line Commands

To display the Copy Bundle screen

- Enter **1** on the command line of the Transfer Object Menu and press Enter.

The Copy Bundle to Target Environment screen appears.

If long report and bundle names are displayed by the system (see settings in System Defaults and Adding a User Profile), the screen Copy Bundle to a Target Environment takes the following form:

- **NumRep**
Number of Reports in the Bundle.

▶ **To list existing Bundles**

- Enter the ID of the target data base in the Target ... (DB) field and the number of the target file in the Target ... (File) field. Press Enter.

If long report and bundle names are displayed by the system (see settings in System Defaults and Adding a User Profile), the screen Copy Bundle to a Target Environment takes the following form:

```

18:36:00          **** ENTIRE OUTPUT MANAGEMENT ****          2000-11-15
User ID GHH          - Copy Bundle to a Target Environment -

Source NOM-DB/FILE ...      88 (DB)   51 (FILE)
Target NOM-DB/FILE ...     __88      _14

Cmd Bundle              Description                      NumRep exist Msg
-----
__ GHH-DEMO                                6 no
__ GHH-TEST                                23 no
__ DEP-ADMA          Created by PWR-EMPL-STD1-S      21 no
__ DEP-COMP          Created by DB-POWER-BIG1-S     11 no
__ DEP-DEPT          Created by PWR-EMPL-STD1-S     11 no
__ DEP-FINA          Created by PWR-EMPL-STD1-S     yes
__ DEP-HUGO          Created by PWR-EMPL-STD1-S     5 no
__ DEP-MARK          Created by PWR-EMPL-STD1-S     26 no
__ DEP-MGMT          Created by PWR-EMPL-STD1-S     10 no
__ DEP-PROD

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

Pressing PF9 (Ext) you can switch to short names display.
Then the Copy Bundle to a Target Environment screen will take the following form:

```

18:33:38          **** ENTIRE OUTPUT MANAGEMENT ****          2000-11-15
User ID GHH          - Copy Bundle to a Target Environment -

Source NOM-DB/FILE ...      88 (DB)   51 (FILE)
Target NOM-DB/FILE ...      __88      _14

Cmd Bundle   Description                                     NumRep exist Msg
-----
__ GHH-DEMO                                     6 no
__ GHH-TEST                                     23 no
__ DEP-ADMA Created by PWR-EMPL-STD1-S          21 no
__ DEP-COMP Created by PWR-EMPL-STD1-S          11 no
__ DEP-DEPT Created by DB-POWER-BIG1-S          11 no
__ DEP-FINA Created by PWR-EMPL-STD1-S          yes
__ DEP-HUGO Created by PWR-EMPL-STD1-S          5 no
__ DEP-MARK Created by PWR-EMPL-STD1-S          26 no
__ DEP-MASK Created by PWR-EMPL-STD1-S          10 no
__ DEP-MGMT Created by PWR-EMPL-STD1-S          19 no
__ DEP-PROD Created by PWR-EMPL-STD1-S
__ DEP-SALE Created by PWR-EMPL-STD1-S

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

Available Line Commands

Command	Explanation
CO	Copy Bundle definition to target environment.
XR	Display related objects and related Reports.

Copying a Bundle to a Target Environment

 **To copy a bundle to a target environment**

- On the Copy Bundle screen, enter CO in the two-character command line preceding the Bundle to copy and press Enter.

A window opens requesting confirmation.

```

18:36:48          **** ENTIRE OUTPUT MANAGEMENT ****          2000-11-15
User ID GHH          - Copy Bundle to a Target Environment -

Source NOM-DB/FILE ...      88 (DB)  51 (FILE)
Target NOM-DB/FILE ...      __88    __14

Cmd Bundle   Description                                     NumRep exist Msg
-----
__ GHH-DEMO                                     no
__ GHH-TEST                                     yes  copied
__ DEP-ADMA Cre +-----+                             6 no
__ DEP-COMP Cre ! Please confirm overwriting of NEW-BUND !     3 no
CO DEP-DEPT Cre ! by typing in its name ==> _____ !     1 yes
__ DEP-FINA Cre !                                     !     1 yes
__ DEP-HUGO Cre !                                     !     yes
__ DEP-MARK Cre ! PF3 Exit                             !     1 yes
__ DEP-MASK Cre +-----+                             5 yes
__ DEP-MGMT Created by PWR-EMPL-STD1-S                26 no
__ DEP-PROD Created by PWR-EMPL-STD1-S                10 no
All
Command => _____
CO copy XR xref
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10---PF11---PF12---
      Help      Exit Flip      -      +      Ext      Menu

```

▶ To copy the Bundle to the target environment

- type the name of the Bundle in the input field provided and press Enter.

The Bundle is copied to the data base and file number specified.

Display Related Objects and Reports for Bundle

- Field Descriptions
- Column Headings

▶ To display related objects and related reports for a bundle

- On the Copy Bundle screen, enter XR in the two-character command line preceding the Bundle for which to display information and press Enter.

The Display Related Objects and Display Related Reports windows open.

```

+-----+ +-----+
! - Display related objects - !!
! NEW-BUND !! - Display related reports - !
! !! Seq Report exist !
! !! ----- !
! Coordinator exist !! 1 AAAAA123456789-12 yes !
! XSISGG yes !! 1 XSISGG-TEST yes !
! Trigger Reports exist !! 1 XXXXXXXXX no !
! ----- !
! XSISGG-TEST yes !!
! no !!
! AAAAA123456789-12 yes !!
! no !!
! XXXXXXXXX no !!
+-----+ !
! All !
! PF3 = Exit PF7 = Up PF8 = Dow !
+-----+

Printer exist Printer exist Printer exist Printer exist Printer exist
1:4 _____ 5:8 _____ 9:12 _____ 13:16 _____ 17:20 _____
DISKMVS yes JVDPR611 yes SYSPower yes
HUGO yes SYSPower yes
JVDPR611 yes
NOM211-R yes SYSPower yes
    
```

Field Descriptions

- **Coordinator**
Name of the Bundle Coordinator.
- **Trigger Reports**
Reports specified to trigger automatic Bundle printing.
- **Printer**
Printer(s) specified for automatic printing.

Column Headings

- **Seq**
Sequence in which the Report is printed within the specified group or Bundle.
- **Report**
Report name.

Calendars

- Listing Calendars to be Copied
- Copy Calendar to Target Environment

Listing Calendars to be Copied

- Column Headings
- Available Line Commands

To display the Copy Calendar screen

- Enter **2** on the command line of the Transfer Object Menu and press Enter.


```

13:19:14          **** ENTIRE OUTPUT MANAGEMENT ****          2000-11-15
User ID GHH      - Copy Calendar to a Target Environment -

Source NOM-DB/FILE ... 88 (DB) 51 (File)
Target NOM-DB/FILE ... _88    _14

Cmd Calendar  Year  exist  Msg
-----
___ GHH        1999  yes
___ DEMO-CAL   1999  yes
___ LAMPE      1999  no
___
___
___
___
___
___
___
___
___
All
Command => _____
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help           Exit  Flip           -       +           Menu
    
```

Available Line Commands

Command	Explanation
CO	Copy Calendar definition to target environment.

Copy Calendar to Target Environment

- On the Copy Calendar screen, enter CO in the two-character command line preceding the Calendar to copy and press Enter.

A window opens requesting confirmation.

 **To copy the Calendar to the target environment**

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

The Calendar is copied to the data base and file number specified.

Distribution Lists

- Listing Distribution Lists to be Copied
- Copy Distribution List to Target Environment
- Displaying Related Objects for a Distribution List

Listing Distribution Lists to be Copied

- Column Headings
- Available Line Commands


```

13:20:52          **** ENTIRE OUTPUT MANAGEMENT ****          2000-11-15
User ID GHH      - Copy Distribution List to a Target Environment -

Source NOM-DB/FILE ... 88 (DB) 51 (File)
Target NOM-DB/FILE ... _88    _14

Cmd List      Description                                     Member Part of exist  Msg
-----
___ BERTA                                           4          no
___ DC-GROUP Mitglieder der DC Gruppe             4          no
___ HUGO                                           4          no
___
___
___
___
___
___
___
___
___
All
Command => _____
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help      Exit  Flip          -      +                      Menu
    
```

Available Line Commands

Command	Explanation
CO	Copy Distribution List definition to target environment.
XR	Display related objects.

Copy Distribution List to Target Environment

- On the Copy Distribution List screen, enter CO in the two-character command line preceding the Distribution List to copy and press Enter.

A window opens requesting confirmation.

 **To copy the Distribution List to the target environment**

- Type the name of the Distribution List in the input field provided and press Enter.

The Distribution List is copied to the data base and file number specified.

Displaying Related Objects for a Distribution List

- Column Heading

 **To display related objects for a distribution list**

- On the Copy Distribution List screen, enter XR in the two-character command line preceding the Distribution List for which to display information and press Enter.

The Display Related Objects window opens.

```

13:20:52          **** ENTIRE OUTPUT MANAGEMENT ****          2000-11-15
User ID GHH      - Copy Distribution List to a Target Environment -

Source NOM-DB/FILE ... 88 (DB) 51 (File)
Target NOM-DB/FILE +-----+
!           - Display related objects -           !
Cmd List      Descr !           DC-GROUP           ! rt of exist  Msg
-----
__ BERTA      ! User/List exist   User/List exist !         no
xr DC-GROUP Mitgl !           !           !         no
__ HUGO       ! GW               no           !         no
__           ! MRS              yes          !
__           ! RW               no           !
__           ! UKSJU            no           !
__           !                 !
__           !                 !
__           !                 !
__           !                 !
__           !                 !
All          ! PF3 = Exit  PF7 = Up  PF8 = Down !
Command => _____ +-----+
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help      Exit  Flip      -      +                        Menu

```

Column Heading

- **User/List**
User or a Distribution List as a member of another Distribution List.

Logical Printers

- Listing Logical Printers to be Copied
- Copying a Logical Printer to a Target Environment
- Displaying Related Objects for a Logical Printer

Listing Logical Printers to be Copied

- Column Headings
- Available Line Commands

To display the Copy Logical Printer screen

- Enter **4** on the command line of the Transfer Object Menu and press Enter.

The Copy Printer to a Target Environment screen appears.


```

13:22:57          **** ENTIRE OUTPUT MANAGEMENT ****          2000-11-15
User ID GHH      - Copy Printer to a target Environment -

Source NOM-DB/FILE ... 88 (DB) 51 (File)
Target NOM-DB/FILE ... _88    _14

Cmd Printer  Description                Location                exist  Msg
-----
__ ABC       Print to Connect CON
__ ABCDE                    VTAM Printer DAEPR14    no
__ A234
__ DAEPR12
__ DAEPR14 DC Group Printer    VTAM Printer DAEPR14    no
__ GWPWR
__ MRSCNT0  Print to Connect CON    no
__ MRSCNT1  Print to Connect CON    no
__ MRSCNT11 Connect Printer          no
__ MRSCNT21 Connect Printer          no
__ MRSCNT31 Connect Printer          no
__ MRSPWR   Print to POWER          Print to Power          no
Top Of Data
Command =>
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help      Exit  Flip          -      +                      Menu
    
```

Available Line Commands

Command	Explanation
CO	Copy Logical Printer definition to target environment.
XR	Display related objects.

Copying a Logical Printer to a Target Environment

- On the Copy Logical Printer screen, enter CO in the two-character command line preceding the Logical Printer to copy and press Enter.

A window opens requesting confirmation.

 **To copy the Logical Printer to the target environment**

- Type the name of the Logical Printer in the input field provided and press Enter.

The Logical Printer is copied to the data base and file number specified.

Displaying Related Objects for a Logical Printer

- Column Heading

 **To display related objects for a logical printer**

- On the Copy Logical Printer screen, enter XR in the two-character command line preceding the Logical Printer for which to display information and press Enter.

The Display Related Objects window opens.

```

13:25:12          **** ENTIRE OUTPUT MANAGEMENT ****          2000-11-15
User ID GHH      - Copy Printer to a target Environment -

Source NOM-DB/FILE ... 88 (DB) 51 (File)
Target NOM-DB/FILE ... _88    _14

Cmd Printer  Description                Location                exist  Msg
-----
__ ABC       Print to Connect CON
__ ABCDE     +-----+
__ A234      !      - Display related objects -      !      no
__ DAEPRT12  !                DAEPRT14                !      no
xr DAEPRT14 DC Gr !                !                !      no
__ GWPWR     !      Physical Printer exist                !      no
__ MRSCNT0   Print !                !                !      no
__ MRSCNT1   Print !      DAEPRT14      no                !      no
__ MRSCNT11  Conne !                !                !      no
__ MRSCNT21  Conne +-----+
__ MRSCNT31  Connect Printer
__ MRSPWR    Print to POWER      Print to Power                no
Top Of Data
Command =>
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help      Exit  Flip                -      +                Menu

```

Column Heading

- **Physical Printer**
Name of Physical Printer.

Physical Printers

- Listing Physical Printers to be Copied
- Copying a Physical Printer to a Target Environment

Listing Physical Printers to be Copied

- Column Headings
- Available Line Commands

To display the Copy Physical Printer screen

- Enter **5** on the command line of the Transfer Object Menu and press Enter.

The Copy Physical Printer to a Target Environment screen appears.


```

13:26:58          **** ENTIRE OUTPUT MANAGEMENT ****          2000-11-15
User ID GHH      - Copy Physical-Printer to a target Environment -

Source NOM-DB/FILE ... 88 (DB)   51 (File)
Target NOM-DB/FILE ... _88      _14

Cmd Vtam ID      Location                                     exist  Msg
-----
___ CON-NECT                                           yes
___ CONNECT1                                           no
___ CONNECT2                                           no
___ CONNECT3                                           no
___ DAEPR12                                           no
___ DAEPR14 VTAM Printer DAEPR14                       no
___ HPSPOOL                                           no
___ MRSPRPWR Print to Power                             no
___ SYSPRJES                                           yes
___ SYSPRPWR                                           yes
___ TAPEVSE                                           yes
___
All
Command => _____
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help      Exit  Flip      -      +      Menu
    
```

Available Line Commands

Command	Explanation
CO	Copy Physical Printer definition to target environment.

Copying a Physical Printer to a Target Environment

- On the Copy Physical Printer screen, enter CO in the two-character command line preceding the Physical Printer to copy and press Enter.

A window opens requesting confirmation.

 **To copy the Physical Printer to the target environment**

- Type the name of the Physical Printer in the input field provided and press Enter.

The Physical Printer is copied to the data base and file number specified.

Reports

- Listing Reports to be Copied
- Copying a Report to a Target Environment
- Displaying Related Objects for a Report

Listing Reports to be Copied

- Column Headings
- Available Line Commands

Column Headings

- **Report**
Name of Report. You can enter selection criteria with an asterisk * in this field.
- **Description**
A short description of the Report.

 **To list existing Reports**

- Enter the ID of the target data base in the Target ... (DB) field and the number of the target file in the Target ... (File) field. Press Enter.

If long report and bundle names are displayed by the system (see settings in System Defaults and Adding a User Profile), the screen Copy Report to a Target Environment takes the following form:

```

18:56:20          **** ENTIRE OUTPUT MANAGEMENT ****          2000-11-15
User ID GHH          - Copy Report to a Target Environment -

Source NOM-DB/FILE ...      9 (DB)   242 (FILE)
Target NOM-DB/FILE ...    ____9    __243

Cmd Report              Description exist Msg
-----
__ STD22-VENT94         ( STD2 ) Standard Exit 2 example yes
__ STD22-VENT96         ( STD2 ) Standard Exit 2 example yes
__ UEX-ADDFP-OPEN       Exit ADDFP/OPEN separate sysout in yes
__ UEX-CARS-STD1        Standard Exit 1 example yes
__ UEX-CREATE           Exit CREATE report yes
__ UEX-DEFAULT          Report definition for undefined SY yes
__ UEX-EMPL-STD1-ASA    Standard Exit 1 Example yes
__ UEX-EMPL-STD1-MCC    Standard Exit 1 Example yes
__ UEX-EMPL-STD2-ASA    Standard Exit 2 example yes
__ UEX-EMPL-STD2-MCC    Standard Exit 2 example yes
__ UEX-EMPL-STD31ASA    Standard Exit 3 example yes
More ...
Command => _____
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help      Exit Flip      -      +      Ext      Menu
    
```

By pressing PF9 (Ext), you can toggle to short names display.
Then the Copy Report to a Target Environment screen will take the following form:

```

18:58:09          **** ENTIRE OUTPUT MANAGEMENT ****          2000-11-15
User ID GHH          - Copy Report to a Target Environment -

Source NOM-DB/FILE ...          9 (DB)   242 (FILE)
Target NOM-DB/FILE ...          ___9    __243

Cmd Report          Description          exist Msg
-----
___ STD22-VENT90    ( STD2 ) Standard Exit 2 example          yes
___ STD22-VENT94    ( STD2 ) Standard Exit 2 example          yes
___ STD22-VENT96    ( STD2 ) Standard Exit 2 example          yes
___ UEX-ADDFP-OPEN  Exit ADDFP/OPEN separate sysout into sever yes
___ UEX-CARS-STD1   Standard Exit 1 example                  yes
___ UEX-CREATE      Exit CREATE report                      yes
___ UEX-DEFAULT     Report definition for undefined SYSOUT   yes
___ UEX-EMPL-STD1-ASA Standard Exit 1 Example                  yes
___ UEX-EMPL-STD1-MCC Standard Exit 1 Example                  yes
___ UEX-EMPL-STD2-ASA Standard Exit 2 example                  yes
___ UEX-EMPL-STD2-MCC Standard Exit 2 example                  yes
___ UEX-EMPL-STD31ASA Standard Exit 3 example                  yes
More ...
Command => _____
CO copy XR xref
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help          Exit Flip          -      +      Ext          Menu
    
```

Available Line Commands

Command	Explanation
CO	Copy Report definition to target environment.
XR	Display related objects.

Copying a Report to a Target Environment

- On the Copy Report screen, enter CO in the two-character command line preceding the Report to copy and press Enter.

A window opens requesting confirmation.

 **To copy the Report to the target environment**

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

The Reports are copied to the data base and file number specified.

Displaying Related Objects for a Report

- Column Headings

 **To display related objects for a report**

- On the Copy Report screen, enter XR in the two-character command line preceding the Report for which to display information and press Enter.

The Display Related Objects window opens.

```

18:58:09          **** ENTIRE OUTPUT MANAGEMENT ****          2000-11-15
User ID GHH          - Copy Report to a Target Environment -

Source NOM-DB/FILE ...      9 (DB)   242 (FILE)
Target NOM

          - Display related objects -
Cmd Report          UEX-ADDFP-OPEN          ist Msg
-----+-----+-----+-----+-----+-----+-----+-----+-----+
__ STD22- ! User/List exist Printer exist Printer exist! s
__ STD22- ! _____ 1:10 _____ 11:20 _____! s
__ STD22- ! LIST-1 yes _____ _____ _____! s
XR UEX-AD ! _____ _____ _____ _____! s
__ UEX-CA ! _____ _____ _____ _____! s
__ UEX-CR ! _____ _____ _____ _____! s
__ UEX-DE ! _____ _____ _____ _____! s
__ UEX-EM ! _____ _____ _____ _____! s
More ... +-----+-----+-----+-----+-----+-----+
Command =>
CO copy XR xref
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help      Exit Flip      -      +      Ext      Menu

```

Column Headings

- **User/List**
User or Distribution List in the Distribute to ... field of the Report definition.
- **Printer**
Logical Printer defined for automatic printing of the Report.

Users

- Listing Users to be Copied
- Copying a User to a Target Environment

Listing Users to be Copied

- Column Headings
- Available Line Commands

To display the Copy User screen

- Enter **7** on the command line of the Transfer Object Menu and press Enter.

The Copy User to a Target Environment screen appears.


```

13:31:30          **** ENTIRE OUTPUT MANAGEMENT ****          2000-11-15
User ID GHH          - Copy User to a Target Environment -

Source NOM-DB/FILE ... 88 (DB) 51 (File)
Target NOM-DB/FILE ... _88    _14

Cmd User ID Name                                     exist Msg
-----
__ GHH      Hahn, Gerrit                               yes
__ DRO      Ross, Detlaff                               no
__ DWE      Weichert, Dietmar                           no
__ GHH      Hahn, Gerrit                               no
__ GW       Wagner, Gerhard                             no
__ GW1      Wagner, Gerhard                             no
__ HGR      Graham, Dan                                 no
__ HKA      Kappel, Werner                              no
__ JJU      Jutzi, Juergen                              no
__ LA       Lampe, Ernst                                no
__ MRS      Roser, Markus                                yes
__ MRSD     Roser, Markus                                no
Top Of Data
Command =>
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help      Exit Flip      -      +      Menu
    
```

Available Line Commands

Command	Explanation
CO	Copy User definition to target environment.

Copying a User to a Target Environment

- On the Copy User screen, enter CO in the two-character command line preceding the User to copy and press Enter.

A window opens requesting confirmation.

 **To copy the User to the target environment**

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

The Users are copied to the data base and file number specified.

Report Status

This section covers the following topics:

- Report States
 - Report Definition
 - NOM CONTAINER and DB Files
-

Report States

Entire Output Management creates active reports according to master report definitions. An active report may be in one of four states:

1. Current

This means that the active report has not yet reached its expiry date. It can be viewed online, but is not yet archived.

2. Current/Archived

This is new with Entire Output Management 1.4.1 and means that the report has not yet reached its expiry date, can be viewed online and has already been copied to an archive (so if the spool queue gets deleted, the report isn't lost).

3. Archived

An active report exists but has passed its expiry date. The only copy of it is on an Entire Output Management archive. The report cannot be viewed online.

4. Revived

An active report exists, has passed its expiry date and been archived and has subsequently been revived from the archive so that it is again available for online viewing until its revive expiry date passes.

Additionally, an active report may have an interim state. For example, "to be archived". An active report would be "to be archived" between its expiry and next run of the archive job. Such a report can still be viewed online until the archive job has processed it. (Bear in mind that reports which are on the printout queue waiting to be printed or in a still open active bundle will not be archived, even if they have expired).

Report Definition

- Report Retention Example

Active report handling is governed by various settings in the report definition (or in System Defaults, if the report definition does not specify them).

These settings are explained below.

1. Archive directly

Whether or not an archive copy is to be taken immediately.
May be set to:

Setting	Explanation
Y	As soon as the active report is created it is marked as "to be archived". The next time the archive job runs, the active report will be archived and will no longer be viewable online. If Y is specified, the report retention information is ignored.
I	As soon as the active report is created it is marked as "to be archived and retained online". The next time the archive job runs, the active report is archived, but it is also retained for online viewing until the expiry of the report retention period.
N	The active report is created and is viewable online until the expiry of its report retention.

2. Retention (Report)

These fields specify how long a report is retained for online viewing. You specify a number, for example 5, a unit (A - absolute days, W - working days (can specify a calendar which defines which days are working and which not), V - weeks, M - months, G - generations, that is instances of the same active report), a calendar and an action. The action is ignored if Archive directly is Y or I. Otherwise, action may be A to archive the active report or P to delete it.

3. Retention (Archive)

Specifies how long the active report is to be retained on archive. Again you provide a number and a unit. The unit can be D(ays), W(eeks), M(onths) or Y(ears). As working days is not an option, there is no calendar for Archive retention. When this retention period expires, the active report is completely deleted and cannot be recovered.

4. Retention (Revive)

How long a revived active report is to be retained for viewing. Specify number, unit and calendar, as for Report retention. When this period expires, the active report reverts to an archived state and can no longer be viewed online.

Report Retention Example

Say a report is defined with a report retention period of 5 A and action A.

An active report is created on March 1st, 1999. Its expiry date will be on March 6th, 1999. So the monitor will mark the report as "to be archived" on March 7th, 1999. The next time the archive job is run, the active report contents will be copied to an archive dataset, and if anyone needs to view the report after that, it has to be revived.

NOM CONTAINER and DB Files

- Usage of Container Files

Entire Output Management can copy report contents from their original location (for example, JES spool) into either a container file or the Entire Output Management system file (or both).

Copying into the system file is independent of any container file usage and will only be done for reports that are defined with Store in NOM DB set to Y.

On OS/390 systems, reports should only be copied into the database, if absolutely necessary (for example, to avoid accidental loss through spool deletion) because it is a big overhead to store large reports in the database.

Usage of Container Files

- Defining Container Files
- Compression and Blocking
- Direct Access

Entire Output Management will copy report sources into a container file under the following circumstances:

1. Report is from CMA-SPOOL, Natural Advanced Facilities, SAP or the 3 GL interface.
2. In BS2000/OSD, copy files is set in monitor defaults.
3. In Jes2/Jes3/Power, if a spool file is processed with a DEST that matches one of the destinations defined in monitor defaults/copy files.

Defining Container Files

On the Monitor Defaults screen, press PF7 and the Copy to DB Files window opens, here you define your Container Files, together with the spool destination that will be copied into the associated container file.

CMA-SPOOL, NAF, SAP and 3 GL Interface all have their own subsections in monitor defaults where you can define container files.

Compression and Blocking

Entire Output Management stores output in a multiple field of $11 * 250 = 2761$ bytes, which when this feature was implemented, was at that time the greatest common block size for disk storage devices supported by Adabas.

Giving this MU field to Adabas as it would mean, that every occurrence would normally become shorter by the Adabas compression. Meaning also, that each Adabas record is not filled to our maximum of 2761 bytes and thus resulting in more Adabas calls when storing and retrieving the data. This of course may have high impact on performance when dealing with very large output

For this reason Entire Output Management does the compression itself.

Direct Access

Separating, browsing and printing in parts usually results in the need for direct access to record ranges of the output. This, however, is not given in MF spooling systems and disk data sets with a variable record length. Access to the Entire Output Management container file is of course extremely fast.

Entire Output Management does this storage into the container file before processing any report definitions. The original output is copied as a whole, all following separation processing, browsing and printing in parts will be very fast.

Q: How long does Entire Output Management keep the whole original output stored in the DB?

A: As long as there is at least one active report with location **S** (**S** stands for **source**, not **spool**) pointing to it. This could mean that the container file is filled with very large output, even though only a fraction is actually needed.

Q: When does it make sense to store in a container file?

A: Always when intensive separation processing, browsing or printing in parts is necessary.

Q: We have intensive separation processing, but the resulting reports out of the whole original is only a fraction. What can be done?

A: Set the flag Store in NOM DB in the report definition(s). The resulting reports will be copied from the original output, in our case residing in the container file, into the NOM system file and the location of the report will become **D**. When the next cleanup is done and there are no reports with location **S** pointing to the original source, it will be deleted from the container file.

Be aware though, that for the lifetime of the original output in the container file, reports created with Store in NOM DB in the report definition(s) mean that those parts of the output are indeed stored again in the DB, whereas with location S NOM would keep only pointers to the container file.

In summary:

- use container files for heavy processing.
- In addition, use Store in NOM DB when only small parts of the original are needed or when the resulting reports have very different expiration dates.
- Remember that the report with the highest expiration date will determine the lifetime of the whole original output in the container file.