

# Defining System Defaults

With the System Defaults function you can system-wide defaults.

This section 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**

1. Enter 1 in the command line of the System Administration Menu.

The Default Definition Menu appears. From this menu, you can select the following functions:

- 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
2. To select a function, you enter its number in the command line.

## System Defaults

### To define default parameters for Entire Output Management

1. Enter 1 in the command line of the Default Definition Menu.

The System Defaults screen appears.

```

18:32:08          **** ENTIRE OUTPUT MANAGEMENT ****          15/04/2007
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 ..... 16/04/2007 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

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

### Fields

#### NOM Data File DBID/FNR

The Adabas database ID and file number of the Entire Output Management data file.

#### Use Owner ID

Y - 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, etc.) to use Entire Output Management.

N - The Entire Output Management 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 which is used in all date input and output fields within Entire Output Management. You can select one of the following date formats.

<b>A</b>	<b>American</b>	MM/DD/YY
<b>B</b>		MM/DD/YYYY
<b>E</b>	<b>European</b>	DD/MM/YY
<b>F</b>		DD/MM/YYYY
<b>G</b>	<b>German</b>	DD.MM.YY
<b>J</b>		DD.MM.YYYY
<b>I</b>	<b>International</b>	YY-MM-DD
<b>H</b>		YYYY-MM-DD

<b>Field</b>	<b>Explanation</b>
Support long names	<ul style="list-style-type: none"> <li>● Y - Entire Output Management supports long report and bundle names of up to 25 alphanumeric characters.</li> <li>● N - Long names are not supported: report names can consist of up to 17 alphanumeric characters and bundle names of up to 8 alphanumeric characters.</li> </ul>
Automatic user definition	<ul style="list-style-type: none"> <li>● N - User IDs must be defined manually with the User Maintenance option. This is the default.</li> <li>● P - When an online user enters an ID which exists neither for a user nor a distribution list, he/she will be prompted to decide whether he/she wishes to use the default profile "DEFAULT".</li> <li>● Y - When an online user enters an ID which exists neither for a user nor a distribution list, Entire Output Management defines the user ID with a default profile, without prompting the user. The default profile will be taken from the user ID "DEFAULT".</li> </ul>

Field	Explanation
<b>Daily Cleanup</b>	<p>Once a day, cleanup processing is performed which purges:</p> <ul style="list-style-type: none"> <li>● Active reports or marks them for archiving,</li> <li>● expired active reports from archive/revival,</li> <li>● log records,</li> <li>● printout records,</li> <li>● active bundles.</li> </ul> <p>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 Entire Output Management system file. You should schedule the batch job so that it finishes before the time specified for daily cleanup.</p>
Time	Enter the time you want to execute the cleanup process.
Next run	Date and time of the next cleanup run.
<b>Log</b>	
Types	<p>Enter the following letters for the types of information to be logged:</p> <ul style="list-style-type: none"> <li>● R = Report maintenance information.</li> <li>● B = Bundle maintenance information.</li> <li>● P = Logical printer maintenance information.</li> <li>● D = Distribution list maintenance information.</li> <li>● L = Information about logon/logoff activity of users.</li> </ul>
Retention Period	<p>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:</p> <ul style="list-style-type: none"> <li>● D = days</li> <li>● W = weeks</li> <li>● M = months</li> </ul> <p>For example, 3D (3 days), 5M (5 months), etc.</p>
<b>Printouts</b>	

Field	Explanation
Types	Enter the following letters to delete the printout types automatically at the end of the printout Retention Period: <ul style="list-style-type: none"> <li>● D = Printed successfully.</li> <li>● E = Printing error.</li> <li>● F = Printing failed.</li> </ul>
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 a number followed by a letter, as above for Log Retention Period.

## Integrating Natural Applications

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

1. Press PF9 on the System Defaults screen.

The "System Defaults > Applications" screen appears.

```

10:32:00          **** Entire Output Management ****          11/11/2007
UserId XYZ        - 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
    
```

### Fields

Field	Explanation
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	<p>Enter the application-specific start parameters.</p> <p><b>Note:</b>            Defined Applications are shown on 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.</p>

## 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 one or more subtask/s under Entire System Server or as one or more batch job/s and controls the generation, printing and distribution of reports and bundles.

### POWER / JES2

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

1. Enter 2 in the command line of the Default Definition Menu.

The Monitor Defaults screen appears:

```

17:58:10          **** ENTIRE OUTPUT MANAGEMENT ****          2007-11-08
UserId UKSJU              - Monitor Defaults -

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

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

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

Jobcards
/* TRACE=ON_____
_____
_____

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

**Special PF Keys**

Key	Name	Function
PF7	CopFi	Define container files
PF8	Tasks	Define monitor subtask configuration.
PF9	Archv	Switch to defining automatic archive defaults.

**Fields**

Field	Explanation
Monitor Defaults	
Node	Enter the Entire System Server node number under which the Entire Output Management Monitor is run as a subtask or batch job.
System	System type (e.g. z/OS, z/VSE).
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 <i>Installation and Customization</i> documentation.
System Server Job Name	Enter the name of the Entire System Server job.



Field	Explanation
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 are copied by the monitor into an Entire Output Management container file, from which they can be archived or printed. For further information, see <i>Long Records</i> .	
Container File DBID	Enter the database ID of the Entire Output Management container file to be used.
Container File FNR	Enter the file number of the Entire Output Management container file to be used.
Classes - These 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 datasets in these classes are processed.
Temporary	Define one SYSOUT class to hold temporary SYSOUT datasets. This class <i>must not</i> 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:

Field	Explanation
Execution	<p>Enter a list of execution classes to be processed by Entire Output Management.</p> <p>This method creates considerable performance overhead and should only be used for compatibility reasons. 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:</p> <ul style="list-style-type: none"> <li>• no default definitions are checked for processing;</li> <li>• messages that no report definition has been found for a certain SYSOUT dataset are not logged.</li> </ul>

## BS2000/OSD

BS2000/OSD has two additional fields:

Field	Explanation
Rename files	Entire Output Management usually renames print files during processing by adding an internal ID to make them unique. Enter "Y" (yes) to rename files, or "N" (no) not to rename files.
Virtual printer	<p>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.</p> <p>As of 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.</p>



### Warning:

**Rename=N and changing contents of input files will lead to inconsistent reports unless they are all kept in the database. For this reason, reports resulting out of BS2000/OSD datasets 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

This function is used to define Container Files for the Entire Output Management Monitor. Container Files should be used if separation processing is defined for the SYSOUT and/or if SYSOUT is to be browsed online. Data are compressed in the specified files.

**▶ To invoke this function:**

1. Press PF7 on the Monitor Defaults screen.
2. A window is displayed, in which you can specify the following:

Field	Explanation
Destination	The destination as specified in the DEST=(,...) parameter of the \$LST (POWER) or of the DD statement (JES).
DBID / FNR	The database ID and file number of the Container File.

# Subtask Processing

This function is used to define subtask processing for the Entire Output Management Monitor.

**▶ To invoke this function:**

1. Press PF8 on the Monitor Defaults screen.

The following screen is displayed:

```

12:10:34          **** ENTIRE OUTPUT MANAGEMENT ****          2008-02-29
UserId XYZ          - 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

This function is used to define default parameters for report processing. These defaults apply to newly-created reports. They can be modified for each report.

 **To invoke this function:**

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

The following screen is displayed:

```

17:43:25          **** ENTIRE OUTPUT MANAGEMENT ****          2007-08-24
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
    
```

- The values you enter on this screen 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 *User's Guide*.

### Special PF Keys

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

## Fields

Field	Explanation
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)	<p>A report can be archived from the database or directly from the SPOOL.</p> <p>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".</p> <p>Enter "N" if you do not want automatic archiving.</p> <p>Enter "I" for immediate archiving.</p> <p>For details, see Store in NOM DB Archive directly - Y/N/I and Archive Processing in the section <i>Defining a Report</i> of the <i>User's Guide</i>.</p> <p>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.</p>
Create definition (Y/N)	<p>Enter "Y" to have definitions automatically created for reports produced as a result of separation.</p> <p>Enter "N" , if you do not want definitions to be created.</p>
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 database. When you specify working days, you can enter the name of a Calendar in the Calendar field, below, to include only working days.
Unit	<ul style="list-style-type: none"> <li>● W = Working days</li> <li>● A = Absolute days</li> <li>● V = Weeks</li> <li>● M = Months</li> </ul>
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 <i>working</i> 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.

Field	Explanation
Action	<p>When the Retention Period expires, the report can be archived or purged.</p> <p>Enter A to archive the report. Enter P to purge it.</p> <p><b>Note:</b> If you do not specify a storage location (Entire Output Management or Con-nect) then the report stays in the SPOOL.</p>
Separator	
Start	Enter the name of the separator member to be used for printing the Separator Page at the <i>beginning</i> 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 <i>end</i> 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	<p>Enter the job cards to be used for printing with batch jobs. The following substitution variables can be used:</p> <ul style="list-style-type: none"> <li>● §USER</li> <li>● §REPORT</li> </ul>

## Bundle Processing Defaults

This function is used to define default parameters for bundle Processing. These defaults apply to newly-created bundles. They can be modified for each bundle.

For further information, see *Adding a Bundle Definition* in the *User's Guide*.

### To invoke this function:

1. Enter 4 in the command line of the Default Definition Menu.

The following window is displayed:

```

+-----+
!               - 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           !
!                                                         !
+-----+

```

- The values you enter here are automatically written to the fields with the same names on the Bundle Definition screen.

## Fields

Field	Explanation
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 <i>Retention Period</i> in the <i>User's Guide</i> .  Make your entries accordingly.
Unit	W = working days, A = absolute days, W = 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 <i>working</i> 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 <i>Defining the Retention Period for a Bundle</i> in the section <i>Defining a Bundle</i> of the <i>User's Guide</i> .
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	

Field	Explanation
- List	<p>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 (?).</p> <p>A help window opens.</p> <p>Press Enter again to list the printers.</p> <p>For further information, see <i>Selecting a Logical Printer for a Bundle</i> in the section <i>Defining a Bundle</i> of the <i>User's Guide</i>.</p>
- 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 <i>beginning</i> 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 <i>end</i> 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)	<p>Y is the default value and prints the report separator page.</p> <p>Enter N not to print the separator. The number of separator pages can be defined for each report in the bundle. See <i>Adding a Report to a Bundle</i> in the section <i>Defining a Bundle</i> of the <i>User's Guide</i>.</p>
Print Job Card	<p>Enter the job card to be used for printing on system printers. The following substitution variables can be used:</p> <ul style="list-style-type: none"> <li>● %USER</li> <li>● %BUNDLE</li> </ul>

## Automatic Archiving Defaults

This function is used set default parameters for archiving. These parameters enable you to create archive datasets and schedule automatic archiving.

For further information on Archiving, see the sections *Archive Administration* and *Start Archiving Task*.

### To invoke this function:

1. Enter 5 in the command line of the Default Definition Menu.

The following screen is displayed:



```

13:01:43          **** ENTIRE OUTPUT MANAGEMENT ****          2008-03-18
User ID BRY              - Archiving Parameters -

Default Retention
  Number ..... 20__          Time scheduled ..... Y
  Unit ..... D              Next run ..... 2008-03-19 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
    
```

The above illustration shows the screen as it appears under z/OS. Under other operating systems, the screen looks slightly different.

### Special PF Keys

Key	Name	Function
PF8	Sched	Define Schedule
PF10	Edit	Edit Job Skeleton

### Fields

#### Fields -All Operating Systems

The following fields are common to all operating systems.

Field	Explanation
Default Retention	The parameters entered in the following two fields determine where the archive datasets 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.

Field	Explanation
- 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.  <b>Note:</b> The scheduling process can also be started manually by entering the option code >8.7 in the command line of any screen.
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'.
Dataset Prefix	
- Archive	Enter a prefix to be used for creating archive dataset names. A sequential number is added automatically to this prefix to create a name for an archive dataset. In BS2000/OSD environments, archive dataset prefixes will be automatically preceded by user ID '\$TSOS.'. For example, if the prefix is L99020, the dataset 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 Entire Output Management. Enter "Y" to provide the expiry date on every condense step. 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	Numbers 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.

**Fields - z/OS only**

Field	Explanation
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 dataset.  For information on generation datasets, please refer to the appropriate IBM documentation.
Max. generations	Maximum generations. This field is taken from the definition of the generation dataset and cannot be modified.
Predefined Volsers	Enter up to 5 volsers to be used for archiving.

### Fields - z/VSE only

Field	Explanation
SYS(nnn)	Enter a number to specify the z/VSE system file to be used for archiving.

### Fields - BS2000/OSD only

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

## Defining Archiving Schedule Parameters

### To define Archiving Schedule Parameters

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

The Archiving Parameters/Schedule screen appears:

```

06:15:37          **** Entire Output Management ****          12/11/2007
User ID XYZ          - Archiving Parameters/Schedule -

Next run ..... 12.11.2007 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
    
```

**Fields**

Field	Explanation
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	<p>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.</p> <p>The archiving process can be scheduled for days in the week or days in the month. Enter data <i>either</i> for Weekdays <i>or</i> for Monthly days, but not for both.</p>
Weekdays	<p>Enter the day(s) in the week on which to perform archiving:</p> <ul style="list-style-type: none"> <li>● SU = Sunday</li> <li>● MO = Monday</li> <li>● TU = Tuesday</li> <li>● WE = Wednesday</li> <li>● TH = Thursday</li> <li>● FR = Friday</li> <li>● SA = Saturday</li> </ul>
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	<p>If you specify a Calendar here, archiving is performed only on days defined as <i>workdays</i> in the Calendar. Archiving is not performed on days defined as <i>holidays</i>. To select a Calendar from a list of defined Calendars, enter an asterisk * as wildcard here. The Calendar Selection List window opens.</p> <p>This window lists the names of all defined Calendars. Select a Calendar by entering any character in the field preceding it. The name of the Calendar selected is written to the Calendar field.</p>
Before/After Holiday(s)	Should an archiving date fall on a Calendar holiday, enter A to archive on the first workday <i>after</i> the holiday, enter B to archive on the last workday <i>before</i> the holiday.

## User-Defined Archives

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 Entire Output Management 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:**

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

This section covers the following topics:

- Accessing User-Defined Archiving
- 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

**Accessing User-Defined Archiving**** To access user-defined archiving:**

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

The User Defined Archive Maintenance screen is displayed, listing all existing user-defined archive types:

```

13:55:35          **** ENTIRE OUTPUT MANAGEMENT ****          2008-03-18
User ID XYZ      - User Defined Archive Maintenance -

Cmd   Num   Name           Description
----  ---  -
   1   ARCTEST1   User defined archive test - not currently used
   2   ARCTEST2   User defined archive test
   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

```

For each archive type, the (internally allocated) type number, the name and the short description are displayed.

### Special PF Keys

Key	Name	Function
PF2	Add	Add a new archiving type.

### Line Commands

Command	Function
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 on objects which use this archive type.

## Adding a User-Defined Archive

### To add a user-defined archive:

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

2. The User Defined Archive Type screen appears:

```

14:25:48          **** ENTIRE OUTPUT MANAGEMENT ****          2008-03-18
User ID XYZ          - 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**

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

**Fields**



Field	Explanation
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 these blank, they are taken from Automatic Archiving and Reviving Defaults.

## Defining Keywords for JCL Substitution

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

Certain keywords are reserved for Entire Output Management. If you attempt to add a keyword with a reserved name an error message is returned. It is your own responsibility to ensure that value substitution does not result in invalid JCL (for example, truncation).

### To define keywords for JCL substitution:

1. Press PF9 (Attrb) on the User Defined Archive Type screen.
2. The following screen appears:

```

19:47:54          **** ENTIRE OUTPUT MANAGEMENT ****          2008-04-13
User ID XYZ          - 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**

Key	Name	Function
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 command line preceding the archive type you want to display.

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

**Modifying a User-Defined Archive**

**▶ To modify a user-defined archive:**

1. On the User Defined Archive Maintenance screen, enter MO in the command line preceding the archive type you want to modify.

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

2. You can modify the data displayed by simply entering new data in the input fields.

Then you press ENTER to save your modifications.

A message confirms the modification.

## Deleting a User-Defined Archive

### ▶ To delete a user-defined archive:

1. On the User Defined Archive Maintenance screen, enter DE in the command line preceding the archive type you want to delete.

If CONFIRM is set to ON, a window opens asking you to confirm the deletion.

2. To do so, enter the name of the archive type in the window.

A message confirms that it has been deleted.

## Renaming a User-Defined Archive

### ▶ To rename a user-defined archive:

1. On the User Defined Archive Maintenance screen, enter RN in the command line preceding the archive type you want to rename.
2. A window will be displayed, in which you enter the new name of the archive.

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

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

1. On the User Defined Archive Maintenance screen, enter XR in the command line preceding the archive type for which you want to display information.

A window is displayed, showing how many objects use this archive type:

```

+-----+
!           - XREF of Archive Type -           !
!                   ARCTEST4                   !
!                                               !
! M  Relation Type                               Number  !
!  _  _____                               _____  !
!  _  Report                                     1         !
!  _  Active Report                             54        !
!  _  Archive Dataset                           5         !
!                                               !
!                                               !
!                                               !
!                                               !
! PF3 = Exit                                     !
+-----+

```

2. In the window, mark the relation type with any character to display the list of objects.

# Automatic Reviving Defaults

The Reviving Parameters function enable you to schedule Automatic Reviving.

For further information, see the section *Start Reviving Task*.

**▶ To define default parameters for Reviving:**

1. Enter 6 in the command line of the Default Definition Menu.

The Reviving Parameters screen appears.

```

06:58:32          **** Entire Output Management ****          12/11/2007
User ID XYZ              - Reviving Parameters -

Skeleton ..... JREVSHEL
Schedule
  Time scheduled ..... Y
  Next run ..... 12.11.2007 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

Key	Name	Function
PF10	Edit	Edit Job Skeleton

## Fields

Field	Explanation
Skeleton	Name of the Job Skeleton. Member resides in library SYSNOMU.
<b>Schedule</b>	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 <i>workdays</i> in the Calendar. Reviving is not performed on days defined as <i>holidays</i> . To select a Calendar from a list of defined Calendars, enter an asterisk * as wildcard here. 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. The name of the Calendar selected is written to the Calendar field.
Before/After Holiday	Should a reviving date fall on a Calendar holiday, enter A to revive on the first workday <i>after</i> the holiday, enter B to revive on the last workday <i>before</i> the holiday.
Jobcards	Enter the job cards to be used for reviving.

## Automatic Cleanup Defaults

The Cleanup Parameters function enable you to schedule Automatic Cleanup.

### Defining Cleanup Parameters

#### To define default parameters for Cleanup:

1. Enter 7 in the command line of the Default Definition Menu.

The Cleanup Parameters screen appears.

```

18:01:02          **** ENTIRE OUTPUT MANAGEMENT ****          2007-11-08
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 ... 2005-11-08 18:11

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

**Fields**

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

Field	Explanation
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 Entire Output Management 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 <i>workdays</i> in the Calendar. Cleanup is not performed on days defined as <i>holidays</i> .  To select a Calendar from a list of defined Calendars, enter an asterisk (*) as wildcard here: The Calendar Selection List window opens, listing the names of all defined Calendars. Select a Calendar by entering any character in the field preceding it: 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 <i>after</i> the holiday, enter B to cleanup on the last workday <i>before</i> the holiday.
Scheduled next	Date and time for which the next cleanup run is scheduled.

## CMA-SPOOL Defaults

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 database 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.

**▶ To define default parameters for CMA-SPOOL:**

1. Enter 8 in the command line of the Default Definition Menu.

The following screen appears:

```

18:50:25          **** ENTIRE OUTPUT MANAGEMENT ****          15/04/2007
UserId UKSJU          - CMASPOOL Defaults -

Scan CMA-SPOOL queue ..... N

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

  Destination DBID  FNR    Destination  DBID  FNR
  _____  ____  _____  _____  ____  _____
  NOMFIL2_    9____  247__  _____  ____  _____
  _____  ____  _____  _____  ____  _____
  _____  ____  _____  _____  ____  _____
  _____  ____  _____  _____  ____  _____
  _____  ____  _____  _____  ____  _____
  _____  ____  _____  _____  ____  _____
  _____  ____  _____  _____  ____  _____
  _____  ____  _____  _____  ____  _____

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

**Fields**



Field	Explanation
Scan CMA-SPOOL queue	Activate the CMA-SPOOL interface? Enter Y (yes) or N (no).
CMA-SPOOL Interface Version	Specify your current interface version of CMA-SPOOL, for example 90.
CMA-SPOOL Version (1/2)	Specify your current version of CMA-SPOOL. For versions earlier than 2.0, specify 1. For other versions, specify 2.
Temporary Destination	Specify a virtual CMA-SPOOL destination to which Entire Output Management routes the output to be processed.
Time Limit	Enter the maximum number of seconds the Monitor is allowed to scan for output arriving through the CMA-SPOOL interface in one cycle. A value of 0 means no limit.
Destination	Specify up to 20 destinations to be scanned by Entire Output Management.
DBID / FNR	Specify the database ID and file number of the corresponding Entire Output Management container file in which to store the created reports.

## Natural Advanced Facilities Defaults

Instead of printing output from Natural programs in the Natural Advanced Facilities spool file (FSPOOL), you can route it to an Entire Output Management 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 Natural Advanced Facilities environments output is to be processed. A separate Entire Output Management file can be assigned to each FSPOOL file. However, you can also assign the same Entire Output Management file to all FSPOOL files.

### To define default parameters for Natural Advanced Facilities:

1. Enter 9 in the command line of the Default Definition Menu.

The following screen appears:

```

12:28:48          **** ENTIRE OUTPUT MANAGEMENT ****          2007-07-24
UserId UKSJU      - NATURAL ADVANCED FACILITIES Defaults -

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

      FSPPOOL                      FSPPOOL
      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
    
```

### Fields

Field	Explanation
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.
FSPPOOL DBID / FNR	Database and file number as defined in the FSPPOOL parameter.
DBID / FNR	<p>Entire Output Management file (database and file number).</p> <p>Output is filed to a database and is subject to the transaction logic of the database. 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.</p> <p>For further information, see the section <i>ET/BT Logic</i> in the <i>Natural Advanced Facilities</i> documentation.</p>

# NOM API and User-Exit Defaults

## Defining API Defaults

 To define default parameters for Entire Output Management Application Programming Interfaces

1. Enter 10 in the command line of the Default Definition Menu.

The API Defaults screen is displayed, listing the available user exits.

2. On this screen, you can activate and deactivate the individual user exits by marking them with "Y" or "N" respectively.


## Fields

Field	Explanation
NOM Trigger	<p>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.</p> <p>Documents loaded with the Open Print Option (OPO) will also be processed using the Entire Output Management trigger queue.</p> <p>For further information, see the members NOMTP-D and NOMTP in the libraries SYSNOMU and SYSNOMS respectively, and the section <i>Installing the Open Print Option</i> in the <i>Installation and Customization</i> documentation.</p>
Scan Trigger Queue	<p>Should the Entire Output Management trigger queue be processed? Enter "Y" to activate this interface. "N" = no.</p> <p>For this setting to take effect, you have to restart your monitor.</p>
DBID / FNR	<p>Enter the database ID and file number of the container file in which the trigger data are to be stored.</p> <p><b>Note:</b> If you use a container file for Natural Advanced Facilities printing or the processing of long records, it has to be the same file as defined for the trigger queue.</p>

## User Exits

The user exits described below are located in the Natural library SYSNOMS.

User Exit	Explanation
NOMEX001	<p>This exit is called by the Entire Output Management 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.</p> <p>The exit must set the "process" flag to TRUE to advise Entire Output Management to make the source as subject for its normal cleanup processing, or FALSE to advise it not to process this output. In this case, the exit must switch the output from the Entire Output Management input queue to prevent subsequent processing for the same output.</p>
NOMEX002	<p>This exit is called by the Entire Output Management monitor while scanning the spool queue.</p> <p>The function is called if the exit 002 flag is set to allow the modification of spool attributes before they are stored in the Entire Output Management database.</p>
NOMEX003	<p>This exit is called by Entire Output Management to allow/disallow access to Natural NSPF.</p>
NOMEX004	<p>This exit is called by Entire Output Management to allow suppression of log messages.</p>
NOMEX005	<p>This exit is called by Entire Output Management to allow modification of print job substitution variables.</p>
NOMEX006	<p>This exit is called by Entire Output Management to make available information about completed printouts.</p>
NOMEX007	<p>This exit is called by the Entire Output Management user interface when certain fields are to be modified online. This exit may set init values for the fields and prohibit modification.</p>
NOMEX008	<p>This exit is called by Entire Output Management to allow integration of user-written application logic with Entire Output Management, 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 PF2 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.</p>

User Exit	Explanation
NOMEX009	<p>This exit is called by Entire Output Management to suppress optimization for counting lines of BS2000/OSD input datasets.</p> <p>Assuming 'Rename=N' (BS2000/OSD files will not be renamed). Normally, when a BS2000/OSD dataset is printed more than once by Entire Output Management, Entire Output Management will count the records in the dataset only once and pass this record count on for further processing. This makes sense, because Entire Output Management assumes that the contents of the dataset do not change.</p> <p>Upon special customer request, this exit was created to allow suppression of this optimization. This means that for each print to Entire Output Management the same dataset is counted again, the reason being that the dataset can change its contents and length.</p> <p>In this case, the flag NOMEX009-COUNT-OPTIMIZE should be set to false.</p> <p> <b>Warning:</b>  <b>Rename=N and changing contents of input files will lead to inconsistent reports unless they are all kept in the database. For this reason, reports resulting out of BS2000/OSD datasets 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.</b></p>
NOMEX010	This exit is called by Entire Output Management to get or suppress a log message.
NOMEX011	<p>This exit is called by Entire Output Management 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.</p> <p>The exit 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 Entire Output Management online system. NOM221S contains a sample NOMEX011 as well as the parameter data area P-EXPEX.</p>
NOMEX012	Unused.
NOMEX013	This user exit is called immediately before a report is opened. It will supply attributes of the active report to be opened, spool attributes, and the source attributes. Some fields can be changed and returned to Entire Output Management. For a description of what is to be tested see the program source.

## Input Parameters

Parameter	Explanation
P-EXP-API-VERSION	Current API version (1)
P-EXP-USERID	User ID 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: <ul style="list-style-type: none"> <li>● 0 = include record as is.</li> <li>● 4 = include modified record (P-EXP-RECORD).</li> <li>● 8 = insert P-EXP-RECNO lines from P-EXP-INSERT-LINES (next call to exit is with the same record).</li> <li>● 12 = suppress record.</li> <li>● 16 = terminate export with message P-EXP-RT.</li> <li>● 99 = continue export without calling NOMEX011 again.</li> </ul>
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

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 (Entire Output Management 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.

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

1. Enter 11 in the command line of the Default Definition Menu.

The SAP-Spool Defaults screen appears.

2. On this screen, you can specify the following:

### Fields

Field	Explanation
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
- Line Commands
- Fields
- 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.





```

10:34:53          **** ENTIRE OUTPUT MANAGEMENT ****          2007-11-07
User ID FHI          - Unix Node Definitions -

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

```

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

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

## Line Commands

Command	Function
DI	Display node definition
MO	Modify node definition
DE	Delete node definition

## Fields

Field	Explanation
Node	<p>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:</p> <pre>node_name SATSRV TYPE=ACI           BROKER-ID=...           SERVER-CLASS=NPR           SERVER-NAME=...           SERVICE=node_name           USER-ID=...           WAIT-TIME=30S</pre> <p>For details, see the <i>Entire System Server UNIX Installation</i> documentation.</p> <p>This field is case sensitive.</p>
Suspend	<p>If UNIX nodes are defined, the Entire Output Management 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.</p> <p>On UNIX systems this field can also be filled with "M" or "L". "M" means that this UNIX node is defined as the environment for the monitor. The "M" node can only exist once and is never suspended. An "M" node always calls an existing Entire System Server on UNIX via EntireX (broker) even if the Entire System Server node resides on the same system. To avoid this, you can enter "L" ("local" monitor): This will invoke the Entire System Server as a subprogram of the Natural nucleus without needing any part of EntireX and with a significant performance improvement.</p>
Descr	<p>This field is informational only and describes the node definition.</p>
Temp	<p>Enter a directory here where files are stored that could not be processed by Entire Output Management. This is done to keep the directories "clean" of non-processable files which would waste CPU time.</p> <p>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.</p> <p>This field is case-sensitive.</p>
User ID	<p>This is the user ID on the target node, used to logon to the machine. Entire Output Management will get exactly the rights this user ID has got on the specified node.</p> <p>This field is case-sensitive.</p>
Passw	<p>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.</p> <p>This field is case-sensitive.</p>

Field	Explanation
Confirm	<p>Since the password is entered without display, you have to confirm your password typing it twice.</p> <p>This field is case-sensitive.</p>
Group	<p>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.</p> <p>This field is case-sensitive.</p>
Paths	<p>Enter up to 10 default paths here. When creating a report, one of these paths must be selected for the report.</p> <p>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.</p> <p>These paths are owned by Entire Output Management. 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 Entire Output Management will forget about it.</p> <p>These fields are case-sensitive.</p>
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

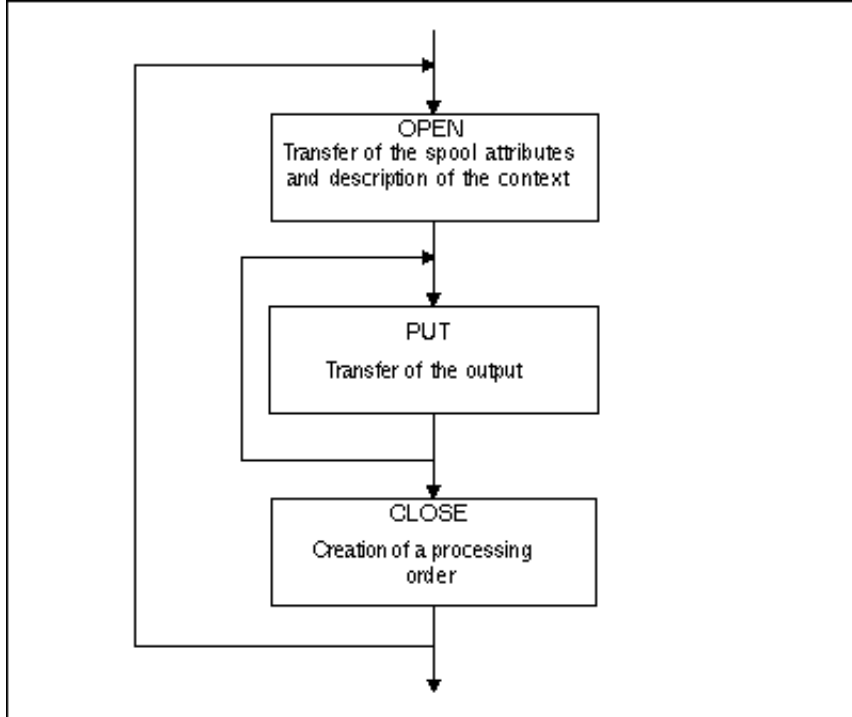
Key	Name	Function
PF9	Path	<p>If you want to enter very long path names, you get the chance to enter up to 69 characters.</p> <p>PF9 will toggle between long and short display of path names.</p>

## 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 <i>3GL Interface Defaults</i> .	
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

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 section 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

#### ▶ To define default parameters for 3GL interfaces

1. Enter 12 in the command line of the Default Definition Menu.

The following screen appears:

```

11:28:08          **** Entire Output Management ****          01/06/2007
User ID XYZ          - 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.

### Line Commands

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

**Fields**

Field	Explanation
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**

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

1. On the 3GL Interface Maintenance screen, enter MO in the command line preceding the interface you want to modify.

The following screen appears:

```

16:29:31          **** Entire Output Management ****          27/07/2007
UserId XYZ              - 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
    
```

2. 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 the modification.

**Fields**

Field	Explanation
3GL Interface <i>nnn</i>	
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. "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) in SYSERR 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	

**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 command line preceding the interface defaults you want to delete.

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.

A message confirms the deletion.

## Displaying 3GL Interface Defaults

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

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.