

# Entire Event Management

## Utilities

Version 2.2.1

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## Preface

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This documentation explains how to use the Import/Export Utility, which allows you to download or upload all or selected objects, and the Message ID Utility, which analyzes a data set or the console log according to various user criteria and displays the result in SYSOUT.

This documentation covers the following topics:

|  |   |
|--|---|
| <b>Import/Export Utility</b>                                   | About the Import/Export Utility.  |
| <b>Importing Entire Event Management Objects</b>               | How to load Entire Event Management objects from storage to your Entire Event Management database.              |
| <b>Exporting Selected Objects</b>                              | How to save the selected object types in an automatically-generated member or a sequential file.                |
| <b>Exporting the Whole Entire Event Management Environment</b> | How to export the whole Entire Event Management environment of System File 2 to a member or an sequential file. |
| <b>Using the Import/Export Utility in Batch Mode</b>           | How to use the Entire Event Management Import/Export Utility in batch mode.                                     |
| <b>Syntax</b>  | How each Entire Event Management logical record is represented in external format.                              |
| <b>Object Types for Import/Export</b>                          | About the Entire Event Management object types that can be exported and imported.                               |
| <b>Message ID Utility</b>                                      | How to use the Message ID Utility.  |

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# 1 Import/Export Utility

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- Functional Overview ..... 2

The Import/Export Utility can be used to:

- Migrate between different versions of Entire Event Management;
- Save the whole Entire Event Management environment or selected objects in external storage;
- Download Entire Event Management objects (e.g.: Rules) used at one location and upload them for use at another location.



**Note:** To use the Import/Export Utility, you must be defined in Entire Event Management as Administrator, that is, no profile must be linked to your user ID.

## Functional Overview

---

The Export function transforms the records from the Entire Event Management database into an external format and writes them to external storage.

The Import function reads the exported records from external storage, analyses the external format and transforms it into the Entire Event Management database format.

The use of the external format permits the transformation of data from different systems:

| System       | Import/Export storage              |
|--------------|------------------------------------|
| IBM/MVS etc. | Sequential file or Natural members |
| BS2000/OSD   |                                    |



## 2 Importing Entire Event Management Objects

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|---|----|
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The import function loads Entire Event Management objects from storage to your Entire Event Management database.

An object type can be imported, only if it conforms to external data format of Entire Event Management.



**Caution:** Use the import function with care. It can add or update definitions to your database. Be sure that the Natural session parameter DC is set to "." (period).

➤ **To import one or more Entire Event Management objects**

- 1 Enter IMPORT in the Command==> line of any screen.
- 2 Press Enter.
- 3 The Import Object window opens:

**Import Object**

```

11:18:58          *** ENTIRE EVENT MANAGEMENT ***          95-04-13
+-----+
!                   - Import Object -                       !
!                   !                                       !
!   Location      ==> SEQ                                   !
!   Library       ==> _____                               !
!   Dsname        ==> _____                               !
!   Volser        ==> _____                               !
!   Node          ==> ____                                   !
!                   !                                       !
! Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--P !
!       Help      End                                       !
!                   !                                       !
+-----+
5  Authorization
6  Calendars

.  Exit
?  Help
*  Commands

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

- 4 Enter values for the input fields as described below:

**Fields: Import Object**

The input fields in the Import Object window are explained in the following table:

| Field    | Description  |   |
|----------|--|---|
| Location | This is the location of the input file to be imported. Possible values:  |   |
|          | NAT  | Natural Source.   |
|          | SEQ  | Sequential file (default value). Use this when importing a large number of objects. |
| Library  | <p>If Location is NAT, enter a Library which contains the exported objects.</p> <p>If Natural Security is installed and you are importing with Location NAT, you must also be authorized in NSC for the Library from which you are importing.</p> <p>If Location is SEQ, leave this field blank.</p> |   |
| Dsname   | If Location is SEQ, you must enter a sequential file name. The file must be allocated and catalogued. If Location is NAT, leave this field blank.  |   |
| Volser   | <p>If Location is SEQ and the operating system is z/VSE, you must enter a valid VOLSER.</p> <p>If Location is NAT, leave this field blank.</p>   |   |
| Node     | <p>If Location is SEQ, you must enter a valid node number.</p> <p>If Location is NAT, leave this field blank.</p>  |   |

5 Press Enter.

The Objects Exported window opens:

**Objects Exported Window**

```

+-----+-----+
!
! 16.04.95  ENTIRE EVENT MANAGEMENT IMPORT/EXPORT UTILITY  10:40:12  !
!                                     Objects exported          Userid KBE  !
!-----+-----+
!  C  Run Date      Time      Type              Name              !
!-----+-----+
!  __ 1 21/03/95    15:53:03 Rule             V* *              !
!  __ 1 24/03/95    13:28:13 *                *                  !
!  __ 2 25/03/95    09:09:25 Profile      *                  !
!  __ 1 25/03/95    09:34:58 User        *                  !
!  __ 2 25/03/95    09:59:38 User        *                  !
!  __ 1 25/03/95    10:21:53 Console    V*                  !
!  __ 1 25/03/95    10:22:14 Node       *                  !
!
!
!
!          Initial mode for import      ==> A
!          Stop after 5 errors
!          Display parsing information ==> N
! Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--P !
!          Help      End      Impor      Up      Down
!-----+-----+


```

If Location is NAT, this window contains a list of the previous export runs. Each entry in the Type column indicates a Natural member and the type of the objects contained.

If Location is SEQ, the list consists of only one line, which indicates the:

- date and time of the last export run that used the sequential data set and
- type of objects contained in the data set.

The input fields and column headings are explained under the headings *Fields: Objects Exported* and *Column Headings: Objects Exported*.

 **Note:** If you have used a data set (Location SEQ) for export and the export run failed, an error message is displayed, if you attempt import this data set.

**PF Keys: Objects Exported**

You can perform the following functions from the Objects Exported window using these PF keys:

| Key | Name  | Function   |
|-----|-------|--|
| PF1 | Help  | Display a help screen for this window.                     |
| PF3 | End   | Return to the Entire Event Management screen.              |
| PF5 | Impor | Start the import function.                                 |
| PF7 | Up    | Scroll towards the top of the list of exported objects.    |
| PF8 | Down  | Scroll towards the bottom of the list of exported objects. |

### Fields: Objects Exported

The input fields in the lower half of the **Objects Exported Window** are explained in the following table:

| Fields                      | Description   |
|-----------------------------|---|
| Initial mode for import     | Enter one of the following values:  |
|                             | A                      Add (default). Adds new objects to Entire Event Management database. Does not overwrite objects with same name.  |
|                             | S                      Scan. Does not import objects, but lists contents of sequential file or member on the screen. For more information, see <a href="#">SCAN Mode</a> .                    |
|                             | U                      Update. Overwrites objects with same name.   |
| Stop after __ errors        | Enter number of errors (1-99) permitted before terminating the import. Default is 5.  |
| Display parsing information | Enter one of the following values:  |
|                             | N                      No (default).  |
|                             | Y                      Yes. During import a window displays current object type, name, parsed value, format, length and line. For more information, see <a href="#">Parsing Information</a> . |



#### Notes:

1. Object type Rule imports only in mode A or S, because of its complex structure.
2. Object type Message Log also imports only in modes A or S.

All values entered are checked for their validity.

### Column Headings: Objects Exported

The following table explains the column headings for the data listed in the **Objects Exported Window**:

| Column | Description   |
|--------|---|
| C      | To select an export run, enter an "x" or "X" in this field.   |
| Run    | Run number of the export = number times the object type has already been exported.  |
| Date   | Date of the export run for this object type.  |
| Time   | Time of the export run for this object type.  |
| Type   | Object type selected by the export function. When the whole environment was exported, this field contains an asterisk (*).                                      |
| Name   | Object name or name range for objects of the export run. When the whole environment or all objects of a type were exported, the field contains an asterisk (*). |

- 6 Select an export run for an object or range of objects, by entering an "X" in the line command field (C column) preceding the Run number.
- 7 Enter values for the input fields on the bottom half of the screen as described under the heading *Fields: Objects Exported*.
- 8 Press PF5 (Impor) to start the import.



**Caution:** Do not press any key while import is running.

- 9 If you select "Y" for parsing, see the subsection *Parsing Information* for further information.
- 10 If import terminates successfully, the Information on Import screen appears with the message Import successful, the number of Objects imported and the Duration of the whole process:

**Information on Import (Import successful)**

```

16.04.1995  ENTIRE EVENT MANAGEMENT IMPORT/EXPORT UTILITY          17:23:40
Mode ADD      Import successful                                Userid BRY
              All Objects: 1 total( 1 accepted/ 0 rejected)
              Objects: 1 total( 1 accepted/ 0 rejected)
              Duration: 00:00:02
              Error/warning: 0 / 0
-----
Type          Name          Console  Errors/Warnings  Duration
-----
Last accepted Object type: CONSOLE
                          Name: KBEADA
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help      End
  
```

If any errors occurred, this screen appears as described in the subsection *Error Handling during Import*. For an explanation of all output fields, see *Fields: Information on Import - not modifiable*, for column headings, see *Column Headings: Information on Import*.

- 11 Press PF3 (End) to exit the import function and return to Entire Event Management.

**Parsing Information**

If you selected "Y" for "Display parsing information" (see *Objects Exported Window* and *Fields: Objects Exported*), the Parsing Information window opens at the bottom of the Objects Exported screen during import:

**Objects Exported**

```

+-----+
!
! 16.04.95   ENTIRE EVENT MANAGEMENT IMPORT EXPORT UTILITY   17:24:28   !
!                                     Objects exported           Userid KBE   !
!-----+-----+
!  C  Run Date      Time      Type              Name              !
!-----+-----+
!  X_  1 16/04/95   14:36:33 *              *                  !
!
!
!
!
!
!
!
!
!
!
!-----+-----+
!
!      Type: NODE              Name: 29              !
!      Keyword: CREATION-TIME=  Value: 13.10.1994 17:35: ! --PF10--PF11--P !
!      Format: DT Length:      Line: 7              !
!-----+-----+

```

**Fields: Parsing Information**

The output fields in the Parsing Information window are explained in the following table:

| Field   | Description                                  |
|---------|--|
| Type    | Current object type.                         |
| Name    | Name of current object type.                 |
| Keyword | Current keyword.                             |
| Value   | Value of current keyword.                    |
| Format  | Format of current keyword.                   |
| Length  | Length of current keyword.                   |
| Line    | Current line of this object type in storage. |



---

## Error Handling during Import

---

If errors or warnings occur during import, some of the possible causes could be, for example:

### Syntax Errors

- A value has invalid format.
- A character in a numeric field.
- A keyword was invalid or did not exist.
- The value of a field exceeds valid length.
- A non-existent object type was specified.

### Syntax Warning

- Object already exists.

These errors should not occur when importing an unchanged exported member.

If you edit the exported member online or create a new member manually, these errors could occur.

### Logical Errors

- Value has correct syntax but does not meet the requirements of Entire Event Management.
- The field has a special range (e.g. only "Y" or "N").
- Adding an object which already exists in Entire Event Management.

If at least one error occurs within the object, the whole object is rejected. Errors and warnings are counted for single objects during the import. If the error limit is reached, the whole import is terminated.

The Import Utility has the following 3 levels of error severity:

- **Warnings**

Warnings are displayed and cause the object to be rejected, because the object already exists (when import mode is ADD). Warnings do not cause termination of the import. Import continues with the next object within the file.

- **Errors**

Errors cause rejection of the object but do not cause termination of the import. Import continues with the next object within the file if the error limit has not been reached.

- **Fatal errors**

Fatal errors are serious problems which cannot be ignored and cause immediate termination of the import. A fatal error occurs, for example, when it is impossible for the parser to continue at a new point.

Whenever an object is rejected it is saved in the member ERR-MEBR of the SYSNCLIE library. This member contains the rejected objects and the errors which caused the rejection.

If the error limit is reached, the whole import is terminated and the following window opens:

**Error limit**

```
Page      5

OBJECT=.....NODE
KEY=.....38
NAME-L=.....H60-BS2
MAINTENANCE-USERID=.....HKA
MAINTENANCE-TIME=.....16.04.1995.17:26:12
CREATION-TIME=.....+-----+ 17:26:12
END-OBJECT.....!
                ! Error limit was reached during !
Press PF3 to ! the importation process. !
                !
                ! Import will be stopped. !
                !
                +-----+
```

After an import with errors, press Enter.

The Information on Import screen appears (example):

**Information on Import - Import ended with warnings**

```

16.04.1995  ENTIRE EVENT MANAGEMENT IMPORT/EXPORT UTILITY          17:32:31
Mode ADD      Import ended with warnings          Userid BRY
              All Objects: 13 total( 0 accepted/ 13 rejected)
              Objects: 13 total( 0 accepted/ 13 rejected)
              Duration: 00:00:27
Page: 1      Error/warning: 0 / 13
-----
Type          Name          Console  Errors/Warnings          Duration
-----
CONSOLE      ADABAS                      object already exists    00:00:03
CONSOLE      CICS                        object already exists    00:00:01
CONSOLE      COMPLCMD                    object already exists    00:00:01
CONSOLE      COMPLETE                     object already exists    00:00:01

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help      End          Up      Down
    
```

This screen lists the warnings which occurred during the import if the import was not completely successful. The column headings are explained under the heading *Column Headings: Information on Import* and the output fields under the heading: *Fields: Information on Import - not modifiable*.

**Information on Import - Import failed**

```

16.04.1995  ENTIRE EVENT MANAGEMENT IMPORT/EXPORT UTILITY          17:32:59
Mode ADD          Import failed          Userid BRY
                All Objects: 2 total( 1 accepted/ 1 rejected)
                Objects: 2 total( 1 accepted/ 1 rejected)
                Duration: 00:00:05
Page: 1          Error/warning: 1 / 0
-----
Type            Name            Console  Errors/Warnings          Duration
-----
CONSOLE        KBE456                                wrong length of KW          00:00:02

                Last accepted Object type: CONSOLE
                Name: KBE123
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help      End                                Up      Down
    
```

This screen lists errors and warnings which occurred during import:

- if at least one error has occurred and the import was not successful, or
- if the error limit was reached and the import was terminated. In this case, the **Error limit window** opens first. When you press Enter, the screen above appears.

The column headings of the screen above are explained under the heading *Column Headings: Information on Import* and the output fields under the heading *Fields: Information on Import (not modifiable)*.

**PF Keys: Information on Import**

You can perform the following functions from the Information on Import screen using these PF keys:

| Key | Name | Function   |
|-----|------|--|
| PF1 | Help | Display a help screen for this window.           |
| PF3 | End  | Return to the Entire Event Management screen.    |
| PF7 | Up   | Scroll towards the top of the list of errors.    |
| PF8 | Down | Scroll towards the bottom of the list of errors. |

**Fields: Information on Import - not modifiable**

The output fields on the **Information on Import** screen are explained in the following table:

| Field                     | Description  |   |
|---------------------------|--|---|
| Mode                      | Mode in which object type was imported: Add, Scan, Update. For more information, see field description <b>Initial mode for import</b> .                                      |   |
| Import                    | ended with warnings  | At least one object was rejected, because it already exists (when import mode is ADD). Import was not terminated, but continued with the next object within the file. |
|                           | failed   | Import has failed for at least one object type. There are errors in the list.   |
|                           | successful   | There are no errors or warnings.  |
| All Objects               | accepted   | Number of all objects (including dependent objects) accepted for import.  |
|                           | rejected   | Number of all objects (including dependent objects) rejected.   |
|                           | total  | Total number of all objects including dependent objects.  |
| Objects                   | accepted   | Number of main objects (without dependent objects) accepted for import.   |
|                           | rejected   | Number of main objects (without dependent objects) rejected. An error message appears for these objects.  |
|                           | total  | Total number of all main objects without dependent objects.   |
| Duration                  | Total time required to import all object types. Format: HH:II:SS. H = hour, I = minute, S = sec.   |   |
| Error/warning             | Number of errors and warnings, respectively, which occurred during import. If the error limit was reached, a window opens: Error limit was reached and import is terminated. |   |
| Last accepted object type | Object type of the last accepted object.   |   |
| Name                      | Name of the last accepted object.  |   |
| Console                   | Console of the last accepted object (if it was an Automation Rule).  |   |

**Column Headings: Information on Import**

If the import was not completely successful or if the error limit was reached, the errors or warnings which occurred are listed in the columns on the **Information on Import** screen. These are explained below:

| Column          | Description   |
|-----------------|---|
| Type            | Contains the imported failed object type.   |
| Name            | Shows the specified name of the imported object type.                                     |
| Console         | Shows only the specified Console of imported object type Rule.                            |
| Errors/Warnings | Shows a short description of the errors or warnings.                                      |
| Duration        | Time required to import the object type. Format: HH:II:SS. H = hour, I = minute, S = sec. |

## SCAN Mode

If you entered "S" in the Initial mode for import field, the following screen appears when you press PF5 (Impor):



**Note:** The SCAN function does not import objects.

### SCAN mode

```

Page          1

OBJECT=.....NODE
KEY=.....17
NAME-L=.....Example
SHORT-DESCRIPTION=.....test17
SHORT-DESCRIPTION=.....first.example
MAINTENANCE-USERID=.....HKA
MAINTENANCE-TIME=.....16.04.1995.17:24:43
CREATION-TIME=.....22.10.1994.13:49:20
END-OBJECT.....

      Press PF3 to exit or any to continue
    
```

The SCAN function lists the contents of the Natural member or sequential file according to object type. If you started a batch job, the list is written to SYSOUT.

Press Enter until you have listed all the objects in the file or member. When you press Enter after the last object, the **Information on Import** screen appears.

The SCAN function checks for syntax errors only, not for data integrity violations. All errors are added up and if the error limit is reached, the SCAN is stopped. For further information on error handling, see the subsection *Error Handling during Import*.

---

➤ **To interrupt the import during scanning and return to Entire Event Management**

- Press PF3 (End).

## **Additional Tips for Using the Import Function**

---

You should keep in mind the following when importing to an Entire Event Management file:

- If the object already exists in the target, it may be rejected, depending on the import mode. Required fields are necessary for an ADDition.
- For ADD or UPDATE, the related object types must be available or the object will be rejected.
- Only complete objects can be imported. All required fields must be supplied.
- Invalid representations of numbers, date and time fields, etc. must be rejected. This causes the whole object to be rejected.
- The fields MAINTENANCE-TIME and MAINTENANCE-USER are always accepted but are replaced with MAINTENANCE-USER 'IMPORT' and MAINTENANCE-TIME= (time when the import is performed).
- When you are updating periodic groups or multiple fields, all fields which build the periodic identifier of the new group are compared with all entries of the group in the database. If no entry with same identifier exists, the new group is deleted, otherwise, the already existing group is modified.
- Objects with invalid keywords must be rejected.
- The parser always registers if a keyword which does not belong to a multiple field or periodic group occurred more than once within the object - an error occurs.
- Numeric values are accepted with up to 2 decimals. Using more digits is no error.
- The keyword OBJECT must be immediately followed by an equal sign (=) and the name of the object type. See *Entire Event Management Object Types* in the *Concepts and Facilities* documentation for an explanation of object types.





# 3 Exporting Selected Objects

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- Exporting Message Log ..... 26

The export function saves the selected object types in an automatically-generated member or a sequential file.

➤ **To export one or more Entire Event Management objects**

- 1 Enter EXPORT in the Command===> line of any screen and press Enter.

The Object Type window opens:

**Object Type**

```

17:42:55          *** ENTIRE EVENT MANAGEMENT ***          95-04-16
Srv      *          - Main Menu -

  Console Services  -----
!              !      - Select Object Type -      ↵
!      1 Logical Console      !              ↵
!      2 Server              ! __ ALL              ↵
!              ! __ CALENDAR              ↵
!              ! __ CONSOLE              ↵
!      Administration      ! __ LAYOUT              ↵
!              ! __ MESSAGE-LOG              ↵
!      3 Environment        ! __ NODE              ↵
!      4 Automation          ! __ PROFILE              ↵
!      5 Authorization      ! __ RANGE              ↵
!      6 Calendars          ! __ RULE              ↵
!              ! __ SERVER              ↵
!      . Exit                ! __ USER              ↵
!      ? Help                !              ↵
!      * Commands          -----

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

**Notes:**

1. You can bypass this window by entering `EXPORT <object-type>` in the Command==> line and pressing Enter. For the object types Message Log and All (export whole environment), see [Exporting Message Log](#) and [Exporting the Whole Entire Event Management Environment](#) respectively.
  2. Each export data set or Natural member contains objects of the selected type. This also applies for execution in batch mode.
- 2 Select an object type with the cursor and press Enter.
- A selection window opens (in our example, for CONSOLE):

### Select Logical Console

```

17:42:55          *** ENTIRE EVENT MANAGEMENT ***          95-04-16
Srv      *          - Main Menu -

  Console Services          -----
!          !          - Select Logical Console -          ↵
!          !
!  1 Logical Console          !          ↵
!          !
!  2 Server          ! Sel Name      Aut          ↵
!          !
!          !          * _____ !          ↵
!          !          ! ** ***** top of data *****          ↵
!          !
!  Administration          ! ___ Adabas      X          ↵
!          !
!          !          ! ___ CICS          ↵
!          !
!  3 Environment          ! ___ ComplCmd          ↵
!          !
!  4 Automation          ! ___ Complete          ↵
!          !
!  5 Authorization          ! ___ Exec      X          ↵
!          !
!  6 Calendars          ! ___ Netpass          ↵
!          !
!          !          ! ___ Network      X          ↵
!          !
!  . Exit          ! ___ Operator      X          ↵
!          !
!  ? Help          ! ___ Process      X          ↵
!          !
!          * Commands          -----
NCL0701 Please select Logical Console to work with.
Command ==> _____
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help      Exit Flip          Down          Menu
    
```

- 3 Select one object (in our example the console Adabas) with the cursor and press Enter.

If you selected the object types: Console (our example), Rule, Server, Profile or User, the following window opens:

## Export Related Object Types

```

17:43:38          *** ENTIRE EVENT MANAGEMENT ***          95-04-16
Srv      *          - Main Menu -

  Console Services          -----
!          !          - Select Logical Console -          ↵
!          !
!  1 Logical Console          !          ↵
!          !
!  2 Server          ! Sel Name      Aut          ↵
!          !
!          !          * _____ *          !          ↵
!          !          ! ** ***** top of data *****          ↵
!          !
!  Administration          +-----+          ↵
!          !          ! Export          !          ↵
!          !
!  3 Environment          !          !          ↵
!          !
!  4 Automation          ! Related          !          ↵
!          !
!  5 Authorization          !          !          ↵
!          !
!  6 Calendars          ! Object Types?  N          !          ↵
!          !
!          !          !          !          ↵
!          !
!  . Exit          +-----+          ↵
!          !
!  ? Help          ! __ Process  X          ↵
!          !
!  * Commands          -----
Command ==> _____
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help      Exit Flip          Down          Menu
NCL0701 Please select Logical Console to work with.

```

The default is "N" (no).

- 4 Enter "Y" to export the related objects too. For a list of the related objects, see the subsection [Hierarchy of the Object Types](#).
- 5 Press Enter.

The Export Object window opens:

### Export Object

```

17:45:44          *** ENTIRE EVENT MANAGEMENT ***          95-04-16
+-----+
!                                     - Export Object -                                     !
!                                     !                                     !
! Location      ==> SEQ                                     !
! Library       ==> _____                                     !
! Run           ==> 1                                       !
! Dsname        ==> _____                                     !
! Volser        ==> _____                                     !
! Node          ==> _____                                     !
! -----+-----+
! Object Type  ==> Console                                     !
! Name         ==> ADABAS                                     !
!                                     !
!                                     !
! Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--P !
!           Help      End      Expor                                     !
!                                     !
+-----+
Command ==> _____
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help      Exit  Flip                               Down          Menu
NCL0701 Please select Logical Console to work with.
    
```

- 6 Enter values for the input fields as described under the heading *Fields: Export Object*.
- 7 Press PF5 (Expor) to start the export.

 **Caution:** Do not press any key while export is running.

During export a window opens briefly, which informs you about the object currently being exported. This window displays name and type of the object.

When export is finished, this is indicated by the message:

```
Function performed.
```

### PF Keys: Export Objects

You can perform the following functions from the Export Object window using these PF keys:

| Key | Name  | Function                               |
|-----|-------|--|
| PF1 | Help  | Display a help screen for this window. |
| PF3 | End   | Return to Entire Event Management.     |
| PF5 | Expor | Start the export function.             |

### Fields: Export Object

The input and output fields in the Export Object window are explained in the following table:

| Field   | Description   |
|---|---|
| Location  | Enter the target location to which to export the object. Possible values:   |
|   | NAT   Natural Source.   |
|   | SEQ   Sequential file is the default unit. Use this when exporting a large number of objects.   |
| Library   | If Location is NAT, you must enter a target Library for the exported objects. If Location is SEQ, leave this field blank.   |
| Run   | The Import/Export Utility generates a new run number for each export run of each object type. This field is not modifiable.   |
| Dsname  | If Location is SEQ, enter the name of a sequential file:  |
|   | z/OS, z/VSE:   The sequential file to which you are exporting must first be allocated and cataloged, as follows:<br><br>RECFM=FB , LRECL=240 , BLKSIZE=24000 , DSORG=PS<br><br>If the sequential file already exists, it will be overwritten.   |
|   | BS2000/OSD:   For each export, allocation is performed automatically by the Import/Export Utility.  |
|   | If Location is NAT, leave this field blank.   |
| Volser  | If Location is SEQ and the operating system is z/VSE, you must enter a valid VOLSER. If Location is NAT, leave this field blank.  |
| Node  | If Location is SEQ, you must enter a valid node. If Location is NAT, leave this field blank.  |
| Object Type   | This field contains the selected object type and is not modifiable.   |
| Depending on the object type selected, one of the following fields appears beneath the Object Type field (if you select Rule, both the Name and Console fields appear). To enter a new value in these fields, just type over the old value: |   |
| Name  | If Object Type is Calendar, Console, Layout, Rule, Range or Profile, name selected appears here. Enter a prefix followed by an asterisk (*) to export a range of objects for this object type, which fulfil the description. You can export all records of this object type, if you enter an asterisk (*) without a prefix. |
| Node  | If Object Type is Node, the node number (1 to 255) appears here.  |

| Field   | Description   |
|---------|---|
| Key     | If Object Type is Server, the server number appears here.             |
| Userid  | If Object Type is User, the User ID appears here.                     |
| Console | If Object Type is Rule, the name of the related console appears here. |

### Using Wildcards

You can use wildcards to enter selection criteria for the object. For example, enter AD\* in the Name field for Console to export the Console AD and all those beginning with the prefix AD. Enter \* in the field to export all Consoles.

### Abnormal Termination of Export

Export can terminate abnormally for several reasons:

- You are attempting to export an object type with a related object that is not available.

If Location is NAT:

- You could be attempting to write more than 99 members or to select more than 99 object types (there is no limitation, if Location is SEQ).
- Natural Security is installed, but
  - the Library to which you are exporting is not a STEPLIB to SYSNCLIE;
  - you are not authorized for the Library to which you are exporting.
- The Library to which you are exporting must not contain a member with the prefix EVDIR. This prefix is reserved for internal administration.

## Exporting Message Log

---

### » To export the object type Message Log

- 1 Follow steps (1) to (3) (select Message Log) in the subsection *Exporting Selected Objects*.
- 2 Press Enter.

The following window opens:



## Export Message Log

```

17:46:21          *** ENTIRE EVENT MANAGEMENT ***          95-04-16
+-----+-----+
!                                     - Export Message Log -                                     !
!                                     !                                     !
!   Location      ==> SEQ                                     !
!   Run           ==> 1                                       !
!   Dsname        ==> _____                               !
!   Volser        ==> _____                               !
!   Node          ==> ____                                     !
!   -----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
!   Object Type  ==> Message Log                               !
!   Console      ==>                                           !
!   -----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
!   Time from    ==> Date : 16.04.1995   Time : 00:00:00     !
!   Time to      ==> Date : 16.04.1995   Time : 23:59:59     !
!   -----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
! Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--P !
!       Help      End      Expor                                     !
!   -----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
Command ==> EXPORT_____
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help      Exit  Flip                                     Menu

```

- 3 Enter values for the input fields as described in the following.
- 4 Press PF5 (Expor) to start the export.

During export a window opens briefly, which informs you about the object currently being exported. This window displays name and type of the object.

When export is finished, this is indicated by the message:

```
Function performed.
```



**Note:** You should export the Message Log in batch mode to avoid encountering any limits.

### Fields: Export Message Log

The input and output fields in the Export Message Log window are explained in the following table:

| Field         | Description  |  |
|---------------|--|--|
| Location      | SEQ sequential file is the target location to which the object type is exported. This field is not modifiable. |  |
| Run           | The Import/Export Utility generates a new run number for each export run. This field is not modifiable.        |  |
| Diname        | z/OS, z/VSE:   | <p>The sequential file to which you are exporting must first be allocated and cataloged, as follows:</p> <pre>RECFM=FB, LRECL=240, BLKSIZE=24000, DSORG=PS</pre> <p>If the sequential file already exists, it will be overwritten.</p> |
|               | BS2000/OSD:  | For each export, allocation is performed automatically by the Import / Export Utility.   |
| Volser / Node | You must enter a valid VOLSER and node.  |  |
| Object Type   | This field contains the selected object type and is not modifiable.  |  |
| Console       | You must enter the name of the console for which you want to export logged messages. Enter * for all consoles. |  |
| Time-from     | Date   | Default is current day. Enter a valid date. Format conforms to <i>Date Format</i> in <i>Field Descriptions: Set Session Parameters</i> in section <i>Using Entire Event Management</i> .   |
|               | Time   | Default is 00:00:00 (HH:II:SS). Enter a valid time.  |
| Time-to       | Date   | Default is current day. Enter a valid date. Format conforms to <i>Date Format</i> in <i>Field Descriptions: Set Session Parameters</i> in section <i>Using Entire Event Management</i> .   |
|               | Time   | Default is 23:59:59 (HH:II:SS). Enter a valid time. (Time-from must be earlier than Time-to).  |

## 4 Exporting the Whole Entire Event Management Environment

---

This function exports the whole Entire Event Management environment of System File 2 to a member or an sequential file.

➤ **To export the whole Entire Event Management environment**

- 1 Enter EXPORT ALL in the Command====> line of any screen.
- 2 Press Enter.

The following window opens:

### Export Whole Environment

```

17:47:02          *** ENTIRE EVENT MANAGEMENT ***          95-04-16
+-----+
!                               - Export whole environment -                               !
!                                                                                               !
!   Location    ==> SEQ                                                                                               !
!   Library     ==> _____                                                                                               !
!   Run         ==> 1                                                                                               !
!   Dsname      ==> _____                                                                                               !
!   Volser      ==> _____                                                                                               !
!   Node        ==> ____                                                                                               !
!                                                                                               !
! Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--P !
!       Help      End      Expor                                                                                               !
!                                                                                               !
+-----+
!   6 Calendars          ! __ RULE                                                                                               ←
!                                                                                               !
!                                                                                               !
!   . Exit              ! __ SERVER                                                                                               ←
!                                                                                               !
!   ? Help              !                                                                                               ←
!                                                                                               !
!   * Commands          -----                                                                                               ←
! Command ==> EXPORT
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
!       Help      Exit Flip                                                                                               Menu

```

- 3 Enter values for the input fields as described in the following.
- 4 Press PF5 (Expor) to start the export.

During the export, a window opens briefly, which informs you about the object currently being exported. This window displays name and type of the object.

When the export is finished, this is indicated by the message:

```
Function performed.
```



**Note:** You should use the Export Whole Environment option in batch mode and with Location SEQ to avoid encountering any limits.

### PF Keys: Export Whole Environment

You can perform the following functions from the Export Whole Environment window using these PF keys:

| Key | Name  | Function                               |
|-----|-------|--|
| PF1 | Help  | Display a help screen for this window. |
| PF3 | End   | Return to Entire Event Management.     |
| PF5 | Expor | Start the export function.             |

### Fields: Export Whole Environment

The input and output fields in the Export Whole Environment window are explained in the following table:

| Field    | Description  |   |
|----------|--|---|
| Location | Enter the target location to which to export the Entire Event Management. environment. Possible values:                          |   |
|          | NAT  | Natural Source.   |
|          | SEQ  | Sequential file is the default unit.  |
| Library  | If Location is NAT, you must enter a target Library for the exported objects. If Location is SEQ, leave this field blank.        |   |
| Run      | The Import/Export Utility generates a new run number for each export run. This field is not modifiable.                          |   |
| Dsname   | If Location is NAT, leave this field blank. If Location is SEQ:  |   |
|          | z/OS, z/VSE:   | The sequential file to which you are exporting must first be allocated and cataloged, as follows:<br><br>RECFM=FB, LRECL=240, BLKSIZE=24000, DSORG=PS ←<br><br>If the sequential file already exists, it will be overwritten. |
|          | BS2000/OSD:  | For each export, allocation is performed automatically by the Import / Export Utility.  |
| Volser   | If Location is NAT, leave this field blank. If Location is SEQ and the operating system is z/VSE, you must enter a valid VOLSER. |   |
| Node     | If Location is NAT, leave this field blank. If Location is SEQ, you must enter a valid node.                                     |   |



# 5 Using the Import/Export Utility in Batch Mode

---

- Interface Description ..... 34
- PRINT-EXPORT-LIST ..... 36

This chapter demonstrates the use of the Entire Event Management Import/Export Utility in batch mode. NCL $_{nnn}$ .SRCE provides the JCL examples E-EXSYS2, E-EXSYS3, E-IMSYS2 and E-IMSYS3 which show how to use the export and import functions respectively to transport data from/to Entire Event Management System Files 2 and 3. Replace the symbols in brackets <> according to your installation.



**Note:** Be sure that the LFILE assignments correctly reflect your source/target environment. Take particular care to use the correct version of System File 1 when importing objects to System File 2.

During import or export, information about the process is written to SYSOUT. When SYSNCLIE terminates, it writes a final message to SYSOUT to inform you whether the function was terminated successfully or not.

## Interface Description

| Field                    | Description  | Values  | Format | Use |
|--------------------------|--|---|--------|-----|
| LOCATION                 | Container for objects being imported or exported.  | NAT or SEQ  | A3     | E/I |
| LIBRARY                  | Specifies container, if LOCATION=NAT   | <LIBRARY>   | A8     | E/I |
| DSNAME                   | Specifies container, if LOCATION=SEQ   | <DSNAME>  | A54    | E/I |
| VOLSER                   | If LOCATION=SEQ  | <VOLSER>  | A6     | E/I |
| NODE                     | If LOCATION=SEQ  | <NODE>  | N3     | E/I |
| OBJECT-TYPE <sup>1</sup> | Entire Event Management object types from System File 2.   | CALENDAR<br>CONSOLE<br>LAYOUT<br>NODE<br>PROFILE<br>RANGE<br>RULE<br>SERVER<br>USER | A20    | E/I |
|                          | From System File 3 !   | MESSAGE-LOG   |        |     |
|                          | Import/export whole environment from System File 2.  | *   |        |     |
| NAME                     | Name of the OBJECT-TYPE. Use * as wildcard to select range of objects. Leave blank if OBJECT-TYPE = *. If object type is MESSAGE-LOG, enter the name of the console or * for all consoles. | *   | A32    | E   |
|                          | Export all objects of one type.  | *   | A32    | E   |

<sup>1</sup> Required for input when LOCATION=NAT in combination with RUN-NUMBER.



| Field  | Description  | Values                             | Format | Use |
|--|--|------------------------------------|--------|-----|
| CONSOLE  | Required only if OBJECT-TYPE= RULE.<br>Otherwise, leave blank.   | <CONSOLE>                          | A32    | E   |
| RELATION   | If RELATION=Y, the following<br>OBJECT-TYPEs can be exported with their<br>related object types:<br><br><ul style="list-style-type: none"> <li>■ RULE</li> <li>■ CONSOLE</li> <li>■ PROFILE</li> <li>■ SERVER</li> <li>■ USER</li> </ul> Default is "N". | Y / N                              | A1     | E   |
| PRINT-EXPORT-LIST  | See <a href="#">PRINT-EXPORT-LIST</a> .  | blank or any<br>character          | A1     | I   |
| RUN-NUMBER   | Required if LOCATION=NAT. Run number<br>for each OBJECT-TYPE.  | 1 to 99                            | N2     | I   |
| MODE   | Import mode:<br><br>A = Add (default)<br>S = Scan<br>U = Update  | A /S/ U                            | A2     | I   |
| ERROR-LIMIT  | Counter for the error limit. Specifies<br>number of errors permitted before<br>terminating import program. Default is "5".   | 1 to 99                            | N2     | I   |
| USER-ID  | User ID to log on to the Entire System<br>Server, indicated by the parameter NODE.   |                                    | A8     | E/I |
| The following fields are for the object type MESSAGE-LOG only: |  |                                    |        |     |
| DATE-FROM  | Enter a valid date. DATE-FROM must not<br>be later than DATE-TO.   | Format as in<br>Session Parameters | A10    | E   |
| TIME-FROM  | Enter a valid time.  | HH:II:SS                           | A8     | E   |
| DATE-TO  | Enter a valid date.  | Format as in<br>Session Parameters | A10    | E   |
| TIME-TO  | Enter a valid time. TIME-FROM must be<br>earlier than TIME-TO.   | HH:II:SS                           | A8     | E   |

## PRINT-EXPORT-LIST

---

If this parameter is specified with any value not=blank, an EXPORT-LIST is written to SYSOUT.

This list contains information for the selected target environment. An import run is not started. This list documents the user's selection regarding the target environment for the preceding export run(s) (Location and Library or Location, DSNNAME and Node). The list contains the Run Number, Date, Time, Object Type and Object Name for the previously executed export run in this target environment.

### Example JCL for export - z/OS and BS2000/OSD

To export every CONSOLE without related objects to a sequential file:

```
LOGON SYSNCLIE
EXPORT
LOCATION=SEQ;DSNAME=<dataset name>;NODE=<ESY-Node>;%
OBJECT-TYPE=CONSOLE;NAME=*;RELATION=N;%
USER-ID=<user ID>
```

### Example JCL for import - z/OS and BS2000/OSD

To import all CONSOLEs from a Natural member with RUN-NUMBER=1, in update mode, with a maximum of 5 errors or 10 warnings:

```
LOGON SYSNCLIE
IMPORT
LOCATION=NAT;LIBRARY=SYSNCLIE;RUN-NUMBER=1;%
OBJECT-TYPE=CONSOLE;%
MODE=U;ERROR-LIMIT=5;
```

# 6 Syntax

---

|                             |    |
|-----------------------------|----|
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| ▪ Formats .....             | 39 |
| ▪ Multiple Fields .....     | 39 |
| ▪ Periodic Groups .....     | 39 |
| ▪ Comments .....            | 40 |

The following topics are covered below:

## General Information

---

Each Entire Event Management logical record is represented by one entry in external format. Each record is enclosed in OBJECT=keyword and END-OBJECT. Every record which contains a keyword with an alphanumeric value assignment is closed with a semicolon (;). If a string contains a semicolon, it is doubled (;;).

### Example:

```
OBJECT=CONSOLE ;  
...  
END-OBJECT ;
```

encloses a Logical Console definition.

Each field is represented by keyword + value.

### Example:

```
NAME=Test ;  
TIME-T0=235959  
SW-ACTIVE=X ;
```

A keyword must be immediately followed by an equal sign (=). Everything following the equal sign (=) until the next keyword is assumed to belong to the field. The equal sign (=) should not appear in the value itself, but is accepted anyway.

Several keywords and fields may appear on one line.

The sequence of fields within a record is without meaning.

## Formats

| Name |                   | Description  |
|------|-------------------|--|
| A    | = alphanumeric    | Unchanged (or in apostrophes ' '). EBCDIC/ASCII digits.  |
| N    | = numeric         | Natural Edit mask using e.g.: ZZZ9.99 must be valid input for the Natural VAL function. Maximum 2 digits.                                    |
| D    | = date            | Format: YYYYMMDD, where YYYY = year, MM = month, DD = day.   |
| T    | = time            | Format: HHISS. (hours 0 to 24).  |
| DT   | = date and time   | Format: YYYYMMDDHHIIS (Natural type T).  |
| L    | L = logical value | Represented in the database by A1 containing "X" or blank. As external value: "Y", "N", "yes", "no", "true", "false" in upper or lower case. |

## Multiple Fields

Keywords which correspond to multiple fields may appear several times in the external format record.

### Example

```
TREE-SEQUENCE=0001
TREE-SEQUENCE=0002
```

## Periodic Groups

Periodic group fields for one object must follow one another. A group identifier must precede a group entry.

### Example

```
VAR-ASSIGNMENT VAR-NAME=V1;VAR-POSITION=4
```

VAR-ASSIGNMENT is the group identifier and defines two subsequent parameters: VAR-NAME and VAR-POSITION.

During input, the internal group counter is incremented if the group identifier occurs.

For multiple fields and groups it is possible that other fields are defined between them, since the import processing keeps track of the highest used index.

## Comments

---

Lines starting with an asterisk (\*) are treated as comments.

Furthermore, line comments can be appended or inserted starting with /\*.

The comment must end with /\*, if inserted. /\* is accepted as the beginning of a comment only at the beginning of a line or following at least one blank space.

# 7 Object Types for Import / Export

---

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- Reserved Keywords ..... 43
- Common Field Names ..... 43
- Object Descriptions ..... 43
- Hierarchy of the Object Types ..... 50

The following Entire Event Management object types can be exported and imported:

- CONSOLE
- CALENDAR
- LAYOUT
- NODE
- PROFILE
- RANGE
- RULE
- SERVER
- USER
- MESSAGE-LOG

For an explanation of these object types, see *Entire Event Management Object Types* in the *Concepts and Facilities* documentation.

The following topics are covered below:

## Abbreviations

---

| Abbreviation | Explanation  |
|--------------|--|
| +            | Required field                                     |
| D            | Contains date only.                                |
| DT           | Contains date and time.                            |
| K            | Key Field, required.                               |
| M            | Multiple field.                                    |
| PG           | Periodic group identifier.                         |
| PI           | Part of periodic group element "key" (identifier). |
| T            | Contains time only.                                |



## Reserved Keywords

The following reserved keywords appear in all objects:

| Keyword    | Explanation             |
|------------|-------------------------|
| OBJECT     | Beginning of an object. |
| END-OBJECT | End of an object.       |

## Common Field Names

```
K   NAME      A32
+   NAME-L    A32 after upper case translation, <NAME-L> must
      be identical to <NAME>.
```

USER COMMENT and MAINTENANCE-ACTIVITY are part of all objects:

```
<USER COMMENT>

      SHORT-DESCRIPTION  A32 #NSHD=16

<MAINTENANCE-ACTIVITY>

      MAINTENANCE-USERID  A08
      MAINTENANCE-TIME   DT
      CREATION-TIME      DT
```

## Object Descriptions

This subsection lists all object types and their keywords.

- OBJECT=ACTION
- OBJECT=CALENDAR
- OBJECT=CONSOLE/RANGE
- OBJECT=CONSOLE
- OBJECT=EVENT
- OBJECT=LAYOUT
- OBJECT=NODE
- OBJECT=PROFILE

- OBJECT=RANGE
- OBJECT=RULE
- OBJECT=SERVER
- OBJECT=USER
- OBJECT=MESSAGE-LOG

For an explanation of these object types, see *Entire Event Management Object Types* in the *Concepts and Facilities* documentation.

## OBJECT=ACTION

```

K   KEY                 A16 hexadecimal representation of B8
+   NAME                A32
+   TYPE                A04 'BOX', 'CMD', 'JOB', 'MSG', 'NAT', 'NET'
    EXEC-NODE           N03
    WAIT-TIME           N05
    WAIT-TIME-UNIT      A08 blank, 'MIN', 'SEC'
    NAT-PROGRAM         A08
    NAT-LIBRARY         A08 must not be blank, if DBID and FNR > 0
    NAT-DBID            N03
    NAT-FNR             N03
M   CMD-COMMAND         A180
    EOR-OWNER           A10
    EOR-NETWORK         A10
    EOR-JOB             A10
    JOB-NODE            N03
    JOB-VOLSER          A06
    JOB-DSNAME          A54
    JOB-MEMBER          A64
    JOB-MEMBER-TYPE     A08
    JOB-LIBRARY         A08
    JOB-SUBLIB          A08
    JOB-VSAM-CATALOG    A08
    JOB-SUBSTITUTE-SYMBOL A01
    MSG-TEXT            A200
M   MSG-TO-USER         A08 #NU = 5
M   MSG-TO-LOGICAL-CONSOLE A08 #NLC = 5
M   MSG-TO-PHYSICAL-CONSOLE N03 #NPC = 5
M   BOX-TEXT            A220 #NB = 7

```

include <USER COMMENT> and <MAINTENANCE ACTIVITY>

**OBJECT=CALENDAR**

|   |       |                |
|---|-------|----------------|
| K | NAME  | common         |
| K | OWNER | A10            |
| K | YEAR  | N04            |
| + | TABLE | A50 bit string |

include <USER COMMENT> and <MAINTENANCE ACTIVITY>

**OBJECT=CONSOLE/RANGE**

|   |                   |                |
|---|-------------------|----------------|
| K | CONSOLE           | A08            |
| K | RANGE-OF-MSG      | A32            |
|   | PRIORITY          | N03            |
| + | EXCLUDE/INCLUDE   | A01 'E' or 'I' |
|   | REPLY             | A01            |
|   | ME-REPRESENTATION | A09            |

include <USER COMMENT> and <MAINTENANCE ACTIVITY>

**OBJECT=CONSOLE**

|   |                |  |
|---|----------------|--|
| K | NAME           | common                                 |
|   | LIFE-TIME      | N05                                    |
|   | LIFE-TIME-UNIT | A08 'DAYS', 'MONTHS', 'WEEKS', 'YEARS' |
| + | NAME-L         | common                                 |
|   | TIME-FROM      | T                                      |
|   | TIME-TO        | T                                      |
|   | LAYOUT         | A32                                    |
|   | CALENDAR       | A20                                    |
|   | SW-AU-ACTIVE   | A01 ' ' or 'X'                         |
|   | SW-ME-LOG      | A01 ' ' or 'X'                         |

include <USER COMMENT> and <MAINTENANCE ACTIVITY>

**OBJECT=EVENT**

|   |                 |                                      |
|---|-----------------|--------------------------------------|
| K | KEY             | A12 hexadecimal representation of B6 |
| + | NAME            | A32                                  |
|   | LOG             | A01 blank '1', '2', '3'              |
| + | LAST-ACTION-KEY | A04 hexadecimal representation of B2 |
| + | LEVEL           | A04 hexadecimal representation of B2 |
|   | SUBTREE         | A01 ' ' or 'X'                       |
|   | ASSIGNED-TO     | A04 hexadecimal representation of B2 |
|   | FREQUENCY       | N05                                  |

## Object Types for Import / Export

---

```
PG  VAR-ASSIGNMENT #NVA = 10
PI   VAR-NAME          A08
PI   VAR-POSITION      N02
M    MSG-ID            A59 #NMI = 1
     MSG-ID-IDX        N03
PG  TOKEN-OR-EXPRESSION #NTOE = 1
PI,M  TOKEN-AND-EXPRESSION A14 #NTAE = 2
M     JOB-NAME         A08 #NJN = 4

include <USER COMMENT> and <MAINTENANCE ACTIVITY>
```

### OBJECT=LAYOUT

```
K    NAME              common
+    NAME-L            common
     SW-DAY-BREAK      A01 ' ' or 'X'
     SW-FROZEN-BREAK   A01 ' ' or 'X'
PG  LAYOUT #NLAY = 99
PI   SEQUENCE          N02
PI   HEADER            A15
PI   LENGTH            N03

include <USER COMMENT> and <MAINTENANCE ACTIVITY>
```

### OBJECT=NODE

```
+    NAME-L            A32
K    KEY               N03 1 to 255
     TIME-DIFFERENCE   N02.1

include <USER COMMENT> and <MAINTENANCE ACTIVITY>
```

### OBJECT=PROFILE

```
K    NAME              common
+    NAME-L            common
K    PRODUCT           A03
K    TYPE              A02 'MA', 'CV', 'SV'
K    OBJECT-NAME       A32
M    CLASS/LEVEL       A03 #NCL = 50

include <USER COMMENT> and <MAINTENANCE ACTIVITY>
```

**OBJECT=RANGE**

```

K   NAME                common
K   KEY                 A08 hexadecimal representation of B4
+   NAME-L              common
    REPRESENTATION      A09
    PRIORITY            N03
M   MSG-ID              A59 #NMI = 44
    MSG-ID-IDX          N03
PG  TOKEN-OR-EXPRESSION #NTOE = 2
PI,M  TOKEN-AND-EXPRESSION A14 #NTAE = 4
M   JOB-NAME            A08 #NJN = 4
    REPLY-INDICATOR     A01 ' ' or 'X'

```

include <USER COMMENT> and <MAINTENANCE ACTIVITY>

**OBJECT=RULE**

```

K   NAME                common
K   KEY                 A08 hexadecimal representation of B4
K   CONSOLE             A08
+   RANGE               A08 hexadecimal representation of B4
+   RANGE-NAME          A32
+   NAME-L              common
    SW-ACTIVE            A01 ' ' or 'X'
    CALENDAR             A20
M,+  TREE-SEQUENCE      A04 #NTS = 100; hex. representation of B2
    TIME-FROM            T
    TIME-TO              T
    TIMEOUT              N05
    TIMEOUT-UNIT         A08 blank, 'MIN', 'SEC'
    LOCKTIME             N05
    LOCKTIME-UNIT        A08 blank, 'MIN', 'SEC'
    LOOP-CRITERION       A01 '1' or '2'
    LOOP-RESUMETIME      N05
    LOOP-RESUMETIME-UNIT A08 blank, 'MIN', 'SEC'
+   LAST-EVENT-KEY      A04 hexadecimal representation of B2
    REPRESENTATION       A09

```

include <USER COMMENT> and <MAINTENANCE ACTIVITY>

**OBJECT=SERVER**

```

K   KEY                               N03 values 1 to 255
M   CONSOLE                           A08 #NC = 30
M   MSG-ID                             A59 #NC = 88
    MSG-ID-IDX                         N03
    DATA-PREFIX                        A54
    VOLSER                              A06
    MLOG-DBID                           N03
    MLOG-FNR                            N03
    ACTION-DBID                         N03
    ACTION-FNR                          N03
    ACTION-LIBRARY                      A08
    TOKENIZING-DELIMITERS               A10
    MSGID-EXIT                          A08 must start with 'U' or 'Y'
    INIT-EXIT                           A08 must start with 'U' or 'Y'
    GETMSG-WAIT-TIME                    N05
    GETMSG-WAIT-TIME-UNIT                A08 blank, 'MIN', 'SEC'
    ET-MAX-COUNT                         N05 if ne ' ' -> NE <= 0
    ET-MAX-TIME                         N05
    ET-MAX-TIME-UNIT                    A08 blank, 'MIN', 'SEC'
    UNDEF-TIME-FROM                     T
    UNDEF-TIME-TO                       T
    SIZE-ARE-QUEUE                      N09
    SIZE-ANE-QUEUE                      N09
    RULE-TIMEOUT                        N05
    RULE-TIMEOUT-UNIT                   A08 blank, 'MIN', 'SEC'
    LOCKTIME                            N05
    LOCKTIME-UNIT                       A08 blank, 'MIN', 'SEC'
    LOOP-CRITERION                      A01 '1' or '2'
    LOOP-RESUMETIME                     N05
    LOOP-RESUMETIME-UNIT                 A08 blank, 'MIN', 'SEC'
    EVENT-LOOP-FREQUENCY                 N05
    ACTLOG-PREFIX                        A03
    ACTLOG-DB                           A01 ' ' or 'X'
    ACTLOG-NODE                          N03
    ACTLOG-SYSOUT                        A01 ' ' or 'X'
    API-RECEIVER                         A16
    RETRY-WAIT-TIME                      N05
    RETRY-WAIT-TIME-UNIT                 A08 blank, 'MIN', 'SEC'
    SYS3-CLEANUP                         T Format HHISS
    SYS3-CLEANUP-TRACE                  A01

```

include <USER COMMENT> and <MAINTENANCE ACTIVITY>

**OBJECT=USER**

```

K   USER-ID                A08
    ADMINISTRATOR          A01 ' ' or 'X'
K   LAST-NAME              A32
    LAST-NAME-L           A32 lower-case representation of LAST-NAME
    INITIAL                A01
K   FIRST-NAME             A32
    FIRST-NAME-L          A32 lower-case representation of FIRST-NAME
    TITLE                  A24
    DEPT-NAME              A32
    DEPT-NR                A10
M   ADDRESS                 A60 #NAD = 3
    CITY                   A32
    POSTAL-CODE            A10
    COUNTRY                 A08
    PHONE-COUNTRY          N02
    PHONE                   A16
    PHONE-EXT              A10
M   HOME-ADDRESS            A60 #NHA = 3
    HOME-CITY              A32
    HOME-POSTAL-CODE       A10
    HOME-COUNTRY           A08
    HOME-PHONE-COUNTRY     N02
    HOME-PHONE             A16
M   PRODUCT-PROFILE        A35 #NPP = 10
PG  REPRESENTATION-G #NREP = 99
PI  REPRESENTATION         A09
    DATE-POSITION          N01 '1' = left corner, '2' = right corner
    DATE-FORMAT            A01 'A' = American, 'E' = English, 'G' = German
    'I' = international
    NCL-CMD-PROMPT         A01 ' ' or 'X'
    OPERATOR-PROMPT        A01 ' ' or 'X'
    NCL-NODE                A08
    MENU-SELECTION         A01 'A' = alphanumeric codes,
    'N' = numeric codes
    DELETE-CONFIRM         A01 blank, 'Y' = confirm with Y/N,
    'N' = confirm with name
    FLIP/KEY               A01 'F' = action bar, 'K' = PF key display
    ZOOM-PROTECT           A01 ' ' or 'X'
    UKEYS-ON                A01 ' ' or 'X'
    ENTER-SELECTION        A01 'D' = down, 'S' = stay on current page
    ENTER-CONSOLE          A01 'B' = bottom, 'D' = down,
    'S' = stay on current page
    MODE-USER              A01 'B' = backtracking,
    'M' = back to assigned menu
PG  MAGIC #NMAG = 10
PI  MAGIC-CHAR              A01
PI  MAGIC-FIRST             A01
PI  MAGIC-VALUE             A32

```

```
PG PFKEY #NPFK = 24
PI PFKEY-TEXT A05
PI PFKEY-VALUE A32

include <USER COMMENT> and <MAINTENANCE ACTIVITY>
```

### OBJECT=MESSAGE-LOG

MESSAGE-LOG is an object type of System File 3. Its structure does not conform to that of System File 2 object types. The common fields are not used here.

```
K NODE-NR N03
+ TIME DT
K TIME-CNT N17 Format YYYYMMDDHHISST * 10.000
K TIME-CNT-COMPLEMENT N17 999999999999999999 - <TIME-CNT>
K,M CONSOLE A08 #NC = 55
+,M RANGE A08 #NR = 55; hexadecimal representation of B4
MSG-TYPE A01
+ MSG-ID A09
+ KW-ASSIGN-CHAR A01
+ KW-DELIM-CHAR A01
+ KW-MSG-ATTRIBUTES A250 #NK = 2
FROZEN-INDICATOR A01
RULE-TIME-CNT N17 Format YYYYMMDDHHISST * 10.000
ACTION-KEY A16 hexadecimal representation of binary B8
ACTION-TYPE A03
ACTION-STATUS A01
M ACTION-USER-VARIABLES A200 #NA = 3
M STATISTICS A250 #NS = 4
```

## Hierarchy of the Object Types

---

The following table shows the relationship between the different object types.

| Object Type | Object Type Used | Export | Import |
|-------------|------------------|--------|--------|
| CALENDAR    | none             | -      | -      |
| CONSOLE     | RULE             | O      | O      |
|             | CALENDAR         | O      | R      |
|             | CONSOLE-RANGE    | O      | R      |
|             | LAYOUT           | O      | R      |
|             | RANGE            | O      | R      |
| LAYOUT      | none             | -      | -      |
| NODE        | none             | -      | -      |



| <b>Object Type</b> | <b>Object Type Used</b> | <b>Export</b> | <b>Import</b> |
|--------------------|-------------------------|---------------|---------------|
| PROFILE            | CONSOLE                 | O             | R             |
|                    | SERVER                  | O             | R             |
| RANGE              | none                    | -             | -             |
| RULE               | ACTION                  | R             | R             |
|                    | CALENDAR                | O             | R             |
|                    | CONSOLE                 | O             | R             |
|                    | CONSOLE-RANGE           | O             | R             |
|                    | EVENT                   | R             | R             |
|                    | RANGE                   | O             | R             |
| SERVER             | CONSOLE                 | O             | R             |
|                    | NODE                    | O             | R             |
| USER               | PROFILE                 | O             | R             |
| MESSAGE-LOG        | CONSOLE                 | -             | R             |

Object Types Used appearing in **BOLD/ITALICS** cannot be selected for export.

Object Types Used in normal print can be selected for export.

O = Optional. These referred object types can be exported together with the main object, but need not exist, when importing the main object.

R = Required. These referred object types are always exported together with the main object and must exist, when importing the main object.



# 8 Message ID Utility

---

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The following topics are covered below:

## Overview

---

The Entire Event Management Message ID Utility analyzes a data set or the console log according to various user criteria and displays the result in SYSOUT.

You can analyze:

- an z/OS or BS2000/OSD data set
- a PDS member in z/OS
- console log from z/OS or z/VSE

Statistics for the most important IDs are displayed. You can select these IDs depending on your installation. These statistics provide you with a better overview of your daily work and you can formulate an Automation Rule for particularly important message IDs. For further information, see section *Defining an Automation Rule*.

## Usage

---

You can only use this utility in batch mode. NCL<sub>nnn</sub>.SRCE provides JCL examples in E-UTMID and a Natural text member E-UTMIDT, which shows you how to use the function. Replace the symbols in brackets <> according to your installation.

You can analyze every data set from z/OS or BS2000/OSD or a PDS member from z/OS or an z/OS or z/VSE console log. The analysis depends on the user criteria. You can analyze a data set for several different message IDs as follows:

- search for:
  - a Natural mask criterion
  - a special string
  - a combination of both
- search:
  - a range of columns
  - all lines of the data set
  - a range of lines in the data set

After the selection a list is printed in SYSOUT, which displays the message IDs that satisfy the criteria, the number of times each analyzed message ID occurs, their percentage of the total, and a snapshot of the last whole message text where this ID was found.

## JCL Description

This utility runs only in batch mode. JCL requires following parameters:

```
LOGON SYSNCLIE, UTMID--P
```

The following parameters specify the environment where the text member resides:

| Parameter | Description   | Format |
|-----------|---|--------|
| DBID      | Database of the text member.  | N5     |
| FNR       | File number of the text member.   | N5     |
| LIBRARY   | Specifies the container for text member.                                | A8     |
| MEMBER    | Specifies the name of the text member. Contains the selection criteria. | A8     |

## Syntax of the Text Member

The parameters for the analysis must reside in a Natural text member which was specified in the JCL description (above).

The Entire Event Management keywords necessary for the analysis of the data set are described here. Each keyword must be immediately followed by an equal sign (=). Keywords must be separated by a delimiter sign (" or ; or space).

Without the delimiter sign it is not possible to mark the end of one keyword. Every character following the equal sign up until the delimiter is assumed to belong to the keyword value. An equal sign should not appear in the value itself.

Not every keyword must be followed by a value or not all keywords must exist in this text member. The important keywords are NODE=, START-VALUE=, END-VALUE=, MASK= and must always be assigned a value. In BS2000/OSD, you must also assign a value to DSNAME=. In z/OS, if you do not assign a value to this keyword, CONSOLE-LOG is analyzed.

The order of the keywords is not important.

## Description of the Keywords

The following keywords are possible:

| Field        | Description   | Values         | Fmt |
|--------------|---|----------------|-----|
| DSNAME       | Specifies the container with the analyzed messages. If this field is empty, and NODE specifies an z/OS operating system, the CONSOLE-LOG will be analyzed.  | <DSNAME>       | A54 |
| END-VALUE    | Enter a positive number. This number specifies the column within the record where the analysis of the message IDs ends.   | <END-VALUE>    | N3  |
| HIT-LIST-MSG | Enter a positive number, to display first <HIT-LIST-MSG> messages analyzed, starting with the message which occurs most often (to limit the result).  | <HIT-LIST-MSG> | N5  |
| MASK         | <p>Enter a string which is the criterion for the analysis.</p> <p>You can enter every character for the analysis and you can use the Natural Edit Mask criterion too, but the string must be enclosed twice by single quotation marks: ' ' string ' ', if it appears alone.</p> <p>If the Natural Mask criterion appears in a string, the string must be enclosed in single quotation marks ' ' and the Mask criterion must also be enclosed in ' '.</p> <p>If you use a string which consists of more than one word, enclose this string in ' '. The only restrictions are the length of 50 characters and you only can enter up to 10 masks.</p> <p>During the analysis every word (within the record from START-VALUE to END-VALUE) which is separated by a space will be compared with the mask criterion. As soon as one mask is found, the next record will be analyzed (that means not every mask criterion will be used).</p> | <MASK>         | A50 |
| MEMBER       | Name for PDS member on z/OS.  | <MEMBER>       | N3  |
| NODE         | Entire System Server Node. Location for storage.  | <NODE>         | N3  |
| START-VALUE  | Enter a positive number. This number specifies the column within the record where the analysis of the message IDs starts.   | <START-VALUE>  | N3  |
| TIME-FROM    | Enter a valid time from which to analyze the records for a special time range. This time must occur within a record of the data set and start in the column indicated by TIME-POSITION.   | HHISS          | A8  |
| TIME-TO      | Enter a valid time until which to analyze the records for a special time range. This time must occur within a record of the data set and start in the column indicated by TIME-POSITION. TIME-TO must be greater than TIME-FROM.  | HHISS          | A8  |

| Field         | Description   | Values          | Fmt |
|---------------|---|-----------------|-----|
| TIME-POSITION | Column where the time is located in the record. This field is necessary if TIME-TO and TIME-FROM are specified. Leave this field blank, if no time interval is specified. | <TIME-POSITION> | N3  |
| USER          | Required for logon to the Entire System Server indicated by parameter NODE.   | <USER-ID>       | A8  |

### Output Description

#### Output Header

- Title displays the container with the records for analysis, this can be a data set name or a PDS member name or CONSOLE-LOG.
- If a time was specified, it occurs in the next line, for example:

```
FROM: 11:11:11 TO: 22:22:22
```

- This line displays the sum of analyzed messages and the sum of all messages found.
- If a number for the HIT-LIST-MSG was specified, it occurs in the next line. The following text appears:

```
RESULT SHOWS THE FIRST nn MESSAGES
```

where *nn* is the number of messages.

#### Table

- The first column contains the message ID found, which was searched for by the MASK criterion.
- The second column displays the percentages for this message only;
- The third column displays the sum of the percentages from the top until this message;
- The fourth column displays the real counter for this message;
- The last column displays the last message text where this message ID was found. The message text as a substring starts at the column START-VALUE and has a maximum length of 40 characters.

## Examples

---

- The Natural text member contains:

```
DSNAME=NCL.SYS MEMBER=
NODE=148
START-VALUE=56 END-VALUE=70
MASK=ACF
MASK=IE
```

The result is, for example:

```
ANALYSIS OF MESSAGE IDS IN:  NCL.SYS
SUM OF ANALYZED MESSAGES:   37  SUM OF ALL MESSAGES FOUND:    25
-----
MSG ID      %    SUM %    VALUE    SAMPLE MESSAGE TEXT
-----
IEE301I    20.00  20.00     5    IEE301I ADA230MM CANCEL
ACF9C009    16.00  36.00     4    ACF9C009 SAF ENVIRONMENT
ACF9C004    16.00  52.00     4    ACF9C004 TTT SUBSYSTEM
ACF9C005    16.00  68.00     4    ACF9C005 SAF CONTROL PT
IEA989I    12.00  80.00     3    IEA989I SLIP TRAP ID=X22
ACF9C006     8.00  88.00     2    ACF9C006 SAF CLASS
ACF9C007     8.00  96.00     2    ACF9C007 SAF ENTITY
IEF196I     4.00 100.00     1    IEF196I IEF237I JES2 ALL
```

- The Natural text member contains:

```
DSNAME=NCL.SYS
NODE=148
TIME-POSITION=26
TIME-FROM=001250 TIME-TO=001252
HIT-LIST-MSG=5
START-VALUE=56 END-VALUE=70
MASK=ACF
MASK=IE
```

The result is, for example:



```

ANALYSIS OF MESSAGE IDS IN:  NCL.SYS
FROM: 00:12:50 TO: 00:12:52
SUM OF ANALYZED MESSAGES:    20  SUM OF ALL MESSAGES FOUND:    18
RESULT SHOWS THE FIRST      5 MESSAGES
    
```

| MSG ID   | %     | SUM % | VALUE | SAMPLE MESSAGE TEXT      |
|----------|-------|-------|-------|--------------------------|
| ACF9C004 | 22.00 | 22.00 | 4     | ACF9C004 TTT SUBSYSTEM   |
| ACF9C005 | 22.00 | 44.00 | 4     | ACF9C005 SAF CONTROL PT  |
| ACF9C009 | 22.00 | 66.00 | 4     | ACF9C009 SAF ENVIRONMENT |
| ACF9C006 | 11.00 | 77.00 | 2     | ACF9C006 SAF CLASS       |
| ACF9C007 | 11.00 | 88.00 | 2     | ACF9C007 SAF ENTITY      |

- The Natural text member contains:

```

DSNAME=NCL.SYS
NODE=148
HIT-LIST-MSG=5
START-VALUE=56 END-VALUE=80
MASK=''AAANANNN' SAF CLASS'
MASK=IE
    
```

The result is, for example:

```

ANALYSIS OF MESSAGE ID'S IN:  NCL.SYS
SUM OF ANALYZED MESSAGES:    37  SUM OF ALL MESSAGES FOUND:    11
RESULT SHOWS THE FIRST      5 MESSAGES
    
```

| MSG ID   | %  | SUM % | VALUE | SAMPLE MESSAGE TEXT      |
|----------|----|-------|-------|--------------------------|
| IEE301I  | 45 | 45    | 5     | IEE301I ADA230MM CANCEL  |
| IEA989I  | 27 | 72    | 3     | IEA989I SLIP TRAP ID=X22 |
| ACF9C006 | 18 | 90    | 2     | ACF9C006 SAF CLASS       |
| IEF196I  | 9  | 99    | 1     | IEF196I IEF237I JES2 ALL |

