Entire Event Management

Installation and Customization on Mainframes

Version 2.2.1

November 2016

This document applies to Entire Event Management Version 2.2.1.

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

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Preface

This documentation describes step by step how to install Entire Event Management on z/OS, BS2000/OSD and z/VSE. Where differences in procedure occur, these are noted under separate headings z/OS, BS2000/OSD and z/VSE.

This documentation covers the following topics:

General Information	General information on installation jobs, System Maintenance Aid, prerequisites, and the installation tape.
Copying the Tape Contents to Disk	How to copy the platform-specific tape contents to disk.
Installation Procedure	How to install Entire Event Management.
Define Environment for Entire Event Management Server	Parameter blocks and parameters for Entire Event Management.
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Installation Verification	How to verify that an Entire Event Management Server has been installed correctly.
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1 General Information

This chapter covers the following topics:

Installation Jobs

The installation of Software AG products is performed by installation jobs. These jobs are either created manually or generated by System Maintenance Aid (SMA).

For each step of the installation procedure described below, the job number of a job performing the respective task is indicated. This job number refers to an installation job generated by SMA.

If you are not using SMA, a sample installation job of the same number is provided in the job library on the Entire Event Management installation tape; you must adapt this sample job to your requirements.

Note: The job numbers on the tape are preceded by a product code (for example, NCLI061).

Using System Maintenance Aid

For information on using Software AG's System Maintenance Aid (SMA) for the installation process, refer to the *System Maintenance Aid* documentation.

Prerequisites

Before you can install Entire Event Management, the following Software AG products must already be installed at your site:

- Adabas
- Natural
- Entire System Server Version 3.3.2 or higher; only node numbers below 225 can be used.
- System Automation Tools (SAT) Version 3.1.4 with correction SA31401 (or higher). System Automation Tools is shipped with the Entire Event Manager.
- Natural Security (optional)
- Entire Net-Work (optional, for multi-CPU support)
- EntireX Broker (optional when using the API)

The System Automation Tools contains modules shared by the ESM product family: Entire Event Management, Entire Output Management, Entire Operations and Mainframe Navigator. The in-

stallation files for the SAT component are always contained on the installation tape of each product of the ESM family.

The installation procedure for the System Automation Tools component is described in section *Installation on Mainframe Platforms* of the System Automation Tools documentation.

The installation procedure for Entire System Server is described in the Entire System Server Installation documentation.

Notes:

1. BS2000/OSD: When the Entire Event Management Server is running on BS2000/OSD, XS capability is required. If Adabas 8 and Entire System Server 3.3.2 is used it is necessary to apply the ZAP XC62023.
2. Natural: The required Natural version is dependent upon the System Automation Tools version running on your system. Please refer to your System Automation Tools documentation for details.

Installation Tape

The installation tape contains the files listed in the table below. The sequence of the files is shown in the Report of Tape Creation which accompanies the installation tape.

Note concerning the notation *vrs* or *vr*:

If used in the following document, the notation *vrs* or *vr* stands for the relevant version, release, system maintenance level numbers.

z/OS

File Name	Contents
NCL*vrs*.JOBS	Entire Event Management Example Installation Jobs
NCL*vrs*.SRCE	Entire Event Management Source Library
NCL*vrs*.LOAD	Entire Event Management Load Library
NCL*vrs*.SYS1	Entire Event Management System File 1 (Adabas)
NCL*vrs*.SYS2	Entire Event Management System File 2 (Adabas)
NCL*vrs*.SYS3	Entire Event Management System File 3 (Adabas)
NCL*vrs*.INPL	Entire Event Management System Libraries (Natural)
NCL*vrs*.ERRN	Entire Event Management Error Messages
NCL*vrs*.SYSE	Sample definitions for System File 2

BS2000/OSD

File Name	Contents
NCL*vrs*.JOBS	Entire Event Management Example Installation Jobs
NCL*vrs*.SRC	Entire Event Management Source Library
NCL*vrs*.MOD	Entire Event Management Module Library
NCL*vrs*.SYS1	Entire Event Management System File 1 (Adabas)
NCL*vrs*.SYS2	Entire Event Management System File 2 (Adabas)
NCL*vrs*.SYS3	Entire Event Management System File 3 (Adabas)
NCL*vrs*.INPL	Entire Event Management System Libraries (Natural)
NCL*vrs*.ERRN	Entire Event Management Error Messages
NCL*vrs*.SYSE	Sample definitions for System File 2

z/VSE

File Name	Contents
NCL*vrs*.LIBR	Entire Event Management Example Installation Jobs Entire Event Management Source and Load Library
NCL*vrs*.SYS1	Entire Event Management System File 1 (Adabas)
NCL*vrs*.SYS2	Entire Event Management System File 2 (Adabas)
NCL*vrs*.SYS3	Entire Event Management System File 3 (Adabas)
NCL*vrs*.INPL	Entire Event Management System Libraries (Natural)
NCL*vrs*.ERRN	Entire Event Management Error Messages
NCL*vrs*.SYSE	Sample definitions for System File 2

2 Copying the Tape Contents to Disk

This chapter covers the following topics:

z/OS

Copying the Tape Contents to a z/OS Disk

If you are using SMA, refer to the System Maintenance Aid documentation (included in the current edition of the Natural documentation CD).

If you are not using SMA, follow the instructions below.

This section explains how to:

- Copy dataset COPY.JOB from tape to disk.
- Modify this dataset to conform with your local naming conventions.

The JCL in this dataset is then used to copy all datasets from tape to disk.

If the datasets for more than one product are delivered on the tape, the dataset COPY.JOB contains the JCL to unload the datasets for all delivered products from the tape to your disk.

After that, you will have to perform the individual install procedure for each component.

Step 1 - Copy Dataset COPY.JOB from Tape to Disk

The dataset COPY.JOB (Label 2) contains the JCL to unload all other existing datasets from tape to disk. To unload COPY.JOB, use the following sample JCL:

```
//SAGTAPE JOB SAG,CLASS=1,MSGCLASS=X
//* --------------------------------
//COPY EXEC PGM=IEBGENER
//SYSUT1 DD DSN=COPY.JOB,
// DISP=(OLD,PASS),
// UNIT=(CASS,,DEFER),
// VOL=(,RETAIN,SER=<Tnnnnn>),
// LABEL=(2,SL)
//SYSUT2 DD DSN=<hilev>.COPY.JOB,
// DISP=(NEW,CATLG,DELETE),
// UNIT=3390,VOL=SER=<vvvvvv>,
// SPACE=(TRK,(1,1),RLSE),
// DCB=*.SYSUT1
```

```
//SYSPRINT DD SYSOUT=*
//SYSIN DD DUMMY
// ↩
```

Where:

<hilev> is a valid high level qualifier

<Tnnnnn> is the tape number

<vvvvvv> is the desired volser

Step 2 - Modify COPY.JOB

Modify the COPY.JOB to conform with your local naming conventions and set the disk space parameters before submitting this job:

- Set HILEV to a valid high level qualifier.
- Set LOCATION to a storage location.
- Set EXPDT to a valid expiration date.

Step 3 - Submit COPY.JOB

Submit COPY.JOB to unload all other datasets from the tape to your disk.

BS2000/OSD

Copying the Tape Contents to a BS2000/OSD Disk

If you are not using System Maintenance Aid (SMA), use the procedure described below. In this procedure, the values specified below must be supplied.

To copy the datasets from tape to disk, perform the following steps:

- Step 1 - Copy the Library SRVnnn.LIB from Tape to Disk
- Step 2 - Copy the Procedure COPY.PROC from Tape to Disk

- Step 3 - Copy all Product Files from Tape to Disk

Step 1 - Copy the Library SRVnnn.LIB from Tape to Disk

This step is not necessary if you have already copied the library SRV*nnn*.LIB from another Software AG installation tape. For further information, refer to the element #READ-ME in this library. The library SRV*nnn*.LIB is stored on the tape as a sequential file named SRV*vrs*.LIBS containing LMS commands. The current version *vrs* can be obtained from the *Report of Tape Creation*. To convert this sequential file into an LMS-library, execute the following commands:

```
/IMPORT-FILE  SUPPORT=*TAPE(FILE-NAME=SRVvrs.LIBS,       -
  /   VOLUME=<volser>, DEV-TYPE=<tape-device>)
  /ADD-FILE-LINK  LINK-NAME=EDTSAM, FILE-NAME=SRVvrs.LIBS, -
  /   SUPPORT=*TAPE(FILE-SEQ=3), ACC-METH=*BY-CAT,                -
  /   BUF-LEN=*BY-CAT, REC-FORM=*BY-CAT, REC-SIZE=*BY-CAT
  /START-EDT
  @READ  '/'
  @SYSTEM 'REMOVE-FILE-LINK  EDTSAM'
  @SYSTEM 'EXPORT-FILE  FILE-NAME=SRVvrs.LIBS'
  @WRITE  'SRVvrs.LIBS'
  @HALT
  /ASS-SYSDTA  SRVvrs.LIBS
  /MOD-JOB-SW  ON=1
  /START-PROG  $LMS
  /MOD-JOB-SW  OFF=1
  /ASS-SYSDTA  *PRIMARY
```

Where:

<*tape-device*> is the device-type of the tape, e.g. TAPE-C4

<*volser*> is the VOLSER of the tape (see *Report of Tape Creation*)

Step 2 - Copy the Procedure COPY.PROC from Tape to Disk

To copy the procedure COPY.PROC to disk, call the procedure P.COPYTAPE in the library SRV*nnn*.LIB:

```
  /CALL-PROCEDURE  (SRVnnn.LIB,P.COPYTAPE), -
  /   (VSNT=<volser>, DEVT=<tape-device>)
```

If you use a TAPE-C4 device, you may omit the parameter DEVT.

Step 3 - Copy all Product Files from Tape to Disk

To copy all Software AG product files from tape to disk, enter the procedure COPY.PROC:

```
/ENTER-PROCEDURE  COPY.PROC, DEVT=<tape-device>
```

If you use a TAPE-C4 device, you may omit the parameter DEVT. The result of this procedure is written to the file L.REPORT.SRV.

z/VSE

Copying the Tape Contents to a z/VSE Disk

If you are using SMA, refer to the System Maintenance Aid documentation (included in the current edition of the Natural documentation CD).

If you are not using SMA, follow the instructions below.

This section explains how to:

- Copy dataset COPY.JOB from tape to disk.
- Modify this dataset to conform with your local naming conventions.

The JCL in this member is then used to copy all datasets from tape to disk.

If the datasets for more than one product are delivered on the tape, the member COPYTAPE.JOB contains the JCL to unload the datasets for all delivered products from the tape to your disk, except the datasets that you can directly install from tape, for example, Natural INPL objects.

After that, you will have to perform the individual install procedure for each component.

Step 1 - Copy Dataset COPYTAPE.JOB from Tape to Disk

The dataset COPYTAPE.JOB (File 5) contains the JCL to unload all other existing datasets from tape to disk. To unload COPYTAPE.JOB, use the following sample JCL:

```
* $$ JOB JNM=LIBRCAT,CLASS=0,                                          +
* $$ DISP=D,LDEST=(*,UID),SYSID=1
* $$ LST CLASS=A,DISP=D
// JOB LIBRCAT
* ***************************************
*     CATALOG COPYTAPE.JOB TO LIBRARY
* ***************************************
// ASSGN SYS004,NNN                              <------  tape address
// MTC REW,SYS004
// MTC FSF,SYS004,4
ASSGN SYSIPT,SYS004
// TLBL IJSYSIN,'COPYTAPE.JOB'
// EXEC LIBR,PARM='MSHP; ACC S=lib.sublib'       <------- for catalog
/*
// MTC REW,SYS004                                                      ↩

ASSGN SYSIPT,FEC
/*
/&amp;
* $$ EOJ     ↩
```

Where:

NNN is the tape address

lib.sublib is the library and sublibrary of the catalog

Step 2 - Modify COPYTAPE.JOB

Modify COPYTAPE.JOB to conform with your local naming conventions and set the disk space parameters before submitting this job.

Step 3 - Submit COPYTAPE.JOB

Submit COPYTAPE.JOB to unload all other datasets from the tape to your disk.

3 Installation Procedure

Caution: If Entire Event Management has been previously installed (see **Step1** (migration) and **Step 2**) and you have user routines (for example server message ID or initialization exits), take a copy to another library before deleting the objects. You can then copy the user routines back. Alternatively, if you have Natural Security, you can keep your user routines in a steplib of SYSNCLSV. In this case you do not need to take backups when installing a new version of Entire Event Management.

Note: If the installed version of the System Automation Tools sub-component is older than the version provided with the installation tape, install the SAT sub-component according to the description provided in section *Installation on Mainframe Platforms* of the System Automation Tools documentation.

This chapter covers the following topics:

Step 1: Entire Event Management System Files

1. **Installing Entire Event Management for the first time**

   For information on ADALOD utility parameters for loading the System Files, refer to Job I050, Steps 3103, 3106 and 3109.

   Entire Event Management System File 1 contains data which are interpreted by the command processor and control logic and must be loaded containing all data.

   Entire Event Management System File 2 holds all definitions created with Entire Event Management. The file NCL*vrs*.SYSE supplied on the installation tape contains some examples. These examples can be loaded into System File 2 with the Import / Export Utility (see the section ***Importing Example Definitions***).

   Entire Event Management System File 3 holds all messages analyzed for logging by the Entire Event Management Server.

2. **Migration from version 2.1.2**

   There are no changes to the Entire Event Management system files between versions 2.1.2 and 2.2.1. Consequently you can install 2.2.1 and continue to use your existing system files.

   Before installing 2.2.1 it is recommended to delete all old objects and error messages from libraries SYSNCL, SYSNCLSV and SYSNCLIE (Job I051, Step 3100 Delete all Objects; Job I051, Step 3101 Delete Error Messages). Please read the **warning** above first.

3. **Migration from version 2.1.1**

   To migrate from Version 2.1.1, you must:

   a. Delete the old NCL Systemfile 1 (Job I050, Step 3102) and load the new NCL Systemfile 1 (Job I050, Step 3103).

b. Delete all Objects and Error Messages from Libraries SYSNCL,SYSNCLSV, SYSNCLIE (Job I051, Step 3100 and step 3101). Please read the **warning** above first.

c. Use the ADADBS utility (or ADABAS On-line Services) to modify the FDT of System File 2 to change the lengths of fields Q6, Q7, Q9 and QA from 3 to 5 (Job I051, Step 3150). For example:

```
ADADBS CHANGE
FILE=vrs,FIELD='Q6',LENGTH=5
ADADBS CHANGE
FILE=vrs,FIELD='Q7',LENGTH=5
ADADBS CHANGE
FILE=vrs,FIELD='Q9',LENGTH=5
ADADBS CHANGE
FILE=vrs,FIELD='QA',LENGTH=5
```

d. Alternatively, you can load the new System File 2 supplied with Version 2.2.1 and use the import/export utility (NCL*vrs*.JOBS; not supported by SMA) to migrate your existing definitions.

Because of the change in message logging, to normalize the message time to Greenwich Mean Time (GMT), thus avoiding problems when the clock changes, it may be necessary to modify existing logged messages.

For example, when local time is two hours ahead of GMT, if the Entire Event Management 2.2.1 server is started less than two hours after the Entire Event Management 2.1.1 server ended, it can lead to messages being logged with a duplicate time, causing the monitor to fail with Adabas Response Code 198 (duplicate value for unique descriptor).

To prevent this, a routine, MLOGMIGR, is provided in library SYSNCL. You should execute this routine prior to starting the Entire Event Management monitor for the first time. The routine has one optional parameter of format N5 which specifies the number of records to be updated between ETs. The default is 10 and we recommend a small number to avoid Adabas Response Code 197 (unique descriptor pool full). MLOGMIGR (Job I500, Step 3102) then calls the new GMT exit YGETGMTN to obtain the difference between local time and GMT and updates all logged messages appropriately so that:

- there will be no duplicates when Entire Event Management monitor 2.2.1 starts, and
- messages logged under Entire Event Management 2.1.1 still display the correct time after migration to Version 2.2.1.

In summary:

- Take a backup of your Entire Event Management Log File 3 (via ADAULD or ADASAV, Job I500, Step 3100),

- Start Natural, ensuring that LFILE 203 is correctly set to point to the Entire Event Management system file 3 containing the messages to be adjusted (Job I500, Step 3102 executes MLOGMIGR in batch, see note below);

  Or:

  Logon to SYSNCL and execute MLOGMIGR online (see note below).

  Note: Execute MLOGMIGR only once.

- In case of any failure during migration, restore your log file and contact Software AG Support with details of the error.

Step 2: Scratch Entire Event Management Libraries and SYSERR Messages - Job I051, Steps 3100 and 3101

If Entire Event Management has been installed before, scratch all members from the SYSNCL, SYSNCLIE and SYSNCLSV libraries and delete the related SYSERR messages. Please read the **warning** above first.

Step 3: Load the INPL File(s) and the Message File(s)

Use Job I061, Steps 3100 and 3102 to load the programs and error messages for Entire Event Management.

Library	File	Contents
SYSNCL	FNAT	Entire Event Management online part
SYSNCLSV	FNAT	Entire Event Management Server part
SYSNCLIE	FNAT	Entire Event Management utilities
SYSNCLCO	FNAT	Entire Event Management common objects
SYSNCLPI	FNAT	Entire Event Management Application Programming Interface

For further information on the INPL and ERRLODUS utilities, see the Natural documentation.

Step 4: Adapt all Online Natural Parameter Modules - Job I080

1. Add or change the following parameters in your NATPARM module:

```
NTLFILE 201,<NCLSYSF1-DBID>,<NCLSYSF1-FNR>
NTLFILE 202,<NCLSYSF2-DBID>,<NCLSYSF2-FNR>
NTLFILE 203,<NCLSYSF3-DBID>,<NCLSYSF3-FNR>
```

   For System Automation Tools add or check the following parameter:

```
NTLFILE 204,<SAT-FNAT-DBID>,<SAT-FNAT-FNR>
```

   If you have Entire Operations and would like to start a job network from within Entire Event Management, add or check the following parameter:

```
NTLFILE 216,<NOPSYSF1-DBID>,<NOPSYSF1-FNR>
NTLFILE 131,<SATLOG-DBID>,<SATLOG-FNR>
```

2. Reassemble and link the NATPARM module when modification is complete. JCL is contained in the member NATI080 in the Natural Installation Job Library.

Step 5: Relink all Online Natural Nuclei (Job I080)

If you wish to use the Entire Event Management API, you must include the Entire Broker stub module before you perform the relink. See step 6 for correct syntax.

Note: See section *Installation on Mainframe Platforms* of the System Automation Tools documentation.

Step 6: Adapt Parameter Modules and Link Jobs for Subtask Natural

The Entire Event Management server runs as a Natural subtask. For further information, see section *Installation on Mainframe Platforms* of the System Automation Tools documentation. We recommend to use a Natural Shared Nucleus.

In addition to the specifications described in section *Installation on Mainframe Platforms*, you must also adapt the following:

1. **Adapt the Subtask Natural Parameter Module (Job I060)**

   Add or change the following parameters in your NATPARM module:

```
CSTATIC=          (...,QHNDLR,...      Main storage queue handler.
                  (...,BROKER,...)     Optional for NCL API.
```

```
NTLFILE 201,<NCLSYSF1-DBID>,<NCLSYSF1-FNR>
NTLFILE 202,<NCLSYSF2-DBID>,<NCLSYSF2-FNR>
NTLFILE 203,<NCLSYSF3-DBID>,<NCLSYSF3-FNR>
```

   For System Automation Tools add or check the following parameter:

```
NTLFILE 204,<SAT-FNAT-DBID>,<SAT-FNAT-FNR>
```

   If you have Entire Operations and would like to start a job network from within Entire Event Management, add or check the following parameters:

```
NTLFILE 216,<NOPSYSF1-DBID>,<NOPSYSF1-FNR>
NTLFILE 131,<SATLOG-DBID>,<SATLOG-FNR>
```

   For further details, see the *Entire Operations Installation* documentation.

2. **Link Natural Subtask Module**

   z/VSE:

   Take the link job as described in section *Installation on Mainframe Platforms* of the System Automation Tools documentation and adapt the following:

   - Include the library definitions for NCLLIB (and EXXLIB, if you are using the Entire Event Management API) in your LNKEDT procedure: (LIBDEF chain).

```
INCLUDE QHNDLR
INCLUDE TLSRQUEM
INCLUDE NATETB23 (Optional Entire Broker stub)
```

   z/OS:

   Take the link job as described in the section *Installation on Mainframe Platforms* of the System Automation Tools documentation and adapt the following libraries for the linkage:

- **Supplied Entire Event Management Load Library**

```
//NCLLIB DD DISP=SHR,DSN=SAGLIB.NCLvrs.LOAD
```

- **Supplied Entire Broker Load Library**

```
//EXXLIB DD DISP=SHR,DSN=SAGLIB.EXXvrs.LOAD
```

The notation *vrs* in file names represents the version number of the product.

```
INCLUDE NCLLIB(QHNDLR)

INCLUDE EXXLIB(NATETB23) (Optional Entire Broker stub)
```

BS2000/OSD:

Take the link job as described in section *Installation on Mainframe Platforms* of the System Automation Tools documentation and adapt the following libraries for the linkage:

- Use the library NCL*vrs*.MOD for the linkage.
- Also use the library EXX*vrs*.LIB for the linkage if you wish to use the Entire Event Management API.

```
INCLUDE QHNDLR

INCLUDE NATETB23 (Optional Entire Broker stub)
```

The Natural parameter module has to be linked to the shared Natural nucleus or to the front-end part of Natural.

4 Define Environment for Entire Event Management Server

See also the section *Define SAT, Natural, Product Parameters* in *Installation on Mainframe Platforms* of the System Automation Tools documentation.

For each Entire Event Management Server you must define the run time environment in one or more Natural members in the SAT user library SYSSATU.

If you want to run various Entire Event Management Servers on different Entire System Server nodes *vrs*, you must provide startup parameters at least in the related "main" members. These must conform to the following naming convention: SATP*vrs*. In addition, you can provide further Entire Event Management- specific parameters in a second member, whose name must not match the naming convention for the "main" members.

This chapter covers the following topics:

General Layout of a Parameter Block

```
<Prefix> <block-identifier> [<keyword>=<value>,...]
```

where:

Parameter	Description
<Prefix>	SAT or compressed product code + prefix as specified in the SATSTART instruction.
<block-identifier>	SATENV/NATENV/SATSTART or product block identifier.
[<keyword>=<value>,...>	Block-specific parameter.

Mandatory Parameter Blocks and Parameters for Entire Event Management

Parameter Block	Parameter	Description
NCLENV	NCLSEQF=	Prefix for the name of the Backup Files used by the Entire Event Management Server (see also the section ***Create Backup Files***).
	VOLSER=	z/VSE only: Volume to which the Backup Files used by the Entire Event Management Server are allocated.
	NCLREFR=Y/N	If set to "Y", Entire Event Management Server downloads the currently assigned definitions from the data base to the backup file and loads from there into main storage. If set to "N", definitions are loaded directly from the backup file.
SATENV	NSC=YES/NO	Indicates whether Natural Security is installed or not.

Parameter Block	Parameter	Description
	NSCUSER=	If Natural Security is installed, this is the user ID for logging on to it.
	NSCPSWD=	Password for logging on to Natural Security.
	ESYUSER=	User ID for logging on to Entire System Server, if it is installed and an interface to an external security system is activated.
	NATTASK=	Name of the Natural subtask module for starting a server as a subtask.
NATENV	LFILE=(202,<NCLSYSF2-DBID>,<NCLSYSF2-FNR>)	
		Pointer to Entire Event Management System File 2. Make sure that this pointer coincides with the pointer to the Entire Event Management System File 2 provided with the SERVSYSF parameter in the SATSTART block. [1]
	LFILE=(203,<NCLSYSF3-DBID>,<NCLSYSF3-FNR>)	
		Pointer to Entire Event Management System File 3. [1]
	LFILE=(204,<SAT-FNAT-DBID>,<SAT-FNAT-FNR>)	
		Pointer to FNAT for System Automation Tools. [1]
	ULANG=1	Language code.
SATSTART	SATVERS=31	Entire Event Management Server startup program supports SAT version 3.1.
	PRODUCT=NCL	3-byte product code.
	PREFIX=	PRODUCT and PREFIX are compressed into a prefix which identifies the Server- specific parameters.
	TYPE=SUBTASK	Entire Event Management Servers are always started as subtasks. [2]
	APPLLIB=SYSNCLSV	Name of the Natural library where Entire Event Management Server is installed.
	SERVSYSF=	Pointer to the Entire Event Management System File 2 (must be unique within all SATSTART instructions of this node).

Notes:

1. When starting subtasks use ETID = ' ' (blanks) and DBOPEN = ON.
2. We recommend that you define SSIZE = 128 (compare *Installation Procedure* of the System Automation Tools documentation, section *Installation on Mainframe Platforms*).

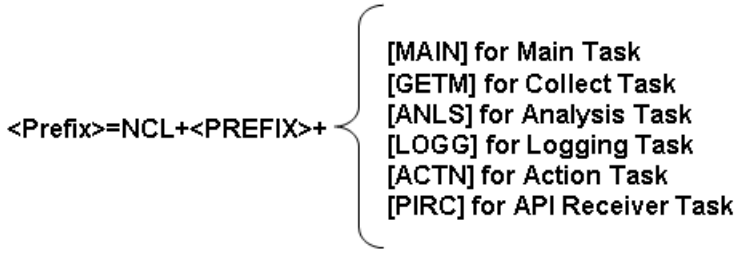
[1] These pointers can be alternately set in the common NATPARM module created for the System Automation Tools products or in a Natural parameter profile indicated by the Natural parameter PROFILE.

[2] On BS2000/OSD these subtasks are simulated by Entire System Server, which submits jobs with names following the convention NCL*xxvrs*, where *xx* stands for the Entire Event Management subtask and *vrs* for the Server number. Values for *xx* can be:

MA	Main Task
LO	Logging Task
AC	Action Task
AN	Analysis Task
GE	Collect Task
US	User Action Tasks
CL	System File 3 Cleanup Task
PI	API Receiver Task

Optional Parameter Blocks and Parameters for Entire Event Management

Furthermore, you can overwrite the SATENV and NATENV parameters with Entire Event Management-specific or even Entire Event Management-subtask-specific assignments. The naming convention for the prefix which identifies the parameter block is:



Parameter Block	Parameter	
NATENV	LFILE=(216,<NOPSYSF1-DBID>,<NOPSYSF1-FNR>)	[1,2,3]
	LFILE=(131,<SATLOG-DBID>,<SATLOG-FNR>)	[1,3,4]
SATSTART	MEMBER=	[5]

[1] These pointers are only needed if Entire Operations is installed and the Entire Event Management Server is to start Entire Operations job networks as automated actions.

[2] Pointer to Entire Operations System File 1.

[3] These pointers can be alternately set in the common NATPARM module created for the System Automation Tools products or in a Natural parameter profile indicated by the Natural parameter PROFILE.

[4] Pointer to SAT log file.

[5] You can specify a member where Entire Event Management-specific parameters are located.

Example: Contents of the 'Main' Member for Node 148 - SATP148 in SYSSATU

The member SATP148 in SYSSAT provides an example of a “main” member. You can take this as the basis for your own member: just copy it to SYSSATU and adapt it.

In the example below it is assumed that you are running three products of the SAT product family (Entire Event Management, Entire Output Management and Entire Operations) as subtasks on Node 148. The parameters of Entire Event Management are located in a second member NCLPARMS.

SAT	SATENV	NATTASK=NAT*vr*SAT, NSC=YES, NSCUSER=SATMON, NSCPSWD=SATMON	[1]
SAT	NATENV	DU=OFF, PROFILE=SATMON	[2]
SAT	SATSTART	SATVERS=31, PRODUCT=NOM, PREFIX=311, TYPE=SUBTASK, APPLIB=SYSNOM, SERVSYSF=(88,51)	[3]
SAT	SATSTART	SATVERS=31, PRODUCT=NOP, PREFIX=511, TYPE=SUBTASK, APPLIB=SYSEOR, SERVSYSF=(88,52)	[4]
SAT	SATSTART	SATVERS=31, PRODUCT=NCL, PREFIX=221, TYPE=SUBTASK, APPLIB=SYSNCLSV, SERVSYSF=(88,54) MEMBER=NCLPARMS	[5]

[1] Sets the System Automation Tools defaults for all System Automation Tools products, here: Entire Event Management, Entire Output Management and Entire Operations. The notation *vr* stands for the relevant version and release of installed Natural.

[2] Sets the Natural defaults for all System Automation Tools products: the Natural profile parameters are provided in the profile SATMON.

[3] Specifies that the server for Entire Output Management 3.1.1 should be started as a subtask.

[4] Specifies that the server for Entire Operations 5.1.1 should be started as a subtask.

[5] Specifies that the server for Entire Event Management 2.2.1 should be started as a subtask and that the default parameters are to be overlaid with the parameters from NCLPARMS.

Contents of the Member NCLPARMS in SYSSATU:

NCL221	NCLENV	NCLSEQF=NCL.SYSF	[1]
		NCLREFR=N	[1]
NCL221MAIN	SATENV	ESYUSER=NCLMAIN	[2]
NCL221GETM	SATENV	ESYUSER=NCLGETM	[2]
NCL221ANLS	SATENV	ESYUSER=NCLANLS	[2]
NCL221LOGG	SATENV	ESYUSER=NCLLOGG	[2]
NCL221ACTN	SATENV	ESYUSER=NCLACTN	[2]
NCL221PIRC	SATENV	ESYUSER=NCLPIRC	[2]

[1] Specify Entire Event Management-specific product parameters.

[2] Specify User IDs for each Entire Event Management subtask for logging on to Entire System Server.

5 Verify Entire Event Management Interfaces for Message Collection

There are two sources from which the Entire Event Management Server can receive messages for further analysis and processing:

- the System Console and
- arbitrary applications which forward events to the Server via the Application Programming Interface (API).

Messages from the System Console

These messages are collected via the Entire System Server view CONSOLE. On z/OS and z/VSE, this view uses the MCS (Multi-Console Support) interface to retrieve the messages, on BS2000/OSD, it uses the UCON interface

Note: The Entire Event Management Server can only react to messages which are not suppressed by means of external filter mechanisms, for example, MPF (Message Processing Facility) on z/OS or the operating system command ASR on BS2000/OSD.

For more information on how to install and use the CONSOLE view, see the view description of Console in the *Entire System Server User's Guide*.

Messages from Applications

These messages are collected via the API Receiver, which is a service that registers with Entire Broker and can optionally be started as a subtask of the Entire Event Management Server or as a separate batch job.

The API Receiver then maps the message received from the API client to an internal format and forwards the resulting message to the Analysis Task of the Entire Event Management Server by means of the Entire System Server view EVENTING.

6 Natural Security Definitions

If Natural Security is installed at your site, you must create the following definitions:

Applications

Application	Description	with STEPLIBs
SYSNCLCO	Entire Event Management common objects	-
SYSNCLPI	Entire Event Management Application Programming Interface	SYSNCLCO SYSSAT
SYSNCLIE	Entire Event Management Import / Export Utility.	SYSEXT SYSSAT SYSSEC SYSNCL SYSNCLCO
SYSNCLSV	Entire Event Management Server application.	SYSNCLCO SYSNCLPI SYSSAT SYSEXT SYSEOR [1]
SYSNCL	Entire Event Management online application.	SYSNCLCO SYSNCLIE SYSNCLPI SYSSAT SYSEXT SYSEOR [1]

[1] Only required if you have Entire Operations and would like to start a job network from within Entire Event Management

User

Define the Natural Security user representing the Entire Event Management Server as person with user ID and password identical to <NSCUSER> and <NSCPSWD> parameters described in the section *Mandatory Parameter Blocks and Parameters for Entire Event Management*.

Specify PRIVATE LIBRARY=YES.

If you define the above applications people-protected, you must link this User to SYSNCLSV and establish the appropriate link for all users of SYSNCL, SYSNCLIE and SYSNCLPI respectively.

Caution: Do not specify a default ETID in order to avoid the error NAT3048 - duplicate active user IDs.

7 Entire Event Management in a Non-security Environment

Online:

If Natural Security is not installed at your site, the following STEPLIBs are automatically assigned to SYSNCL:

- SYSEXT
- SYSSAT
- SYSNCLCO
- SYSNCLIE
- SYSNCLPI

Subtask/Batch:

If Natural Security is not installed at your site, the following STEPLIBs are automatically assigned to SYSNCLIE:

- SYSEXT
- SYSSAT
- SYSNCL
- SYSNCLCO
- SYSSEC

and the following STEPLIB is automatically assigned to SYSNCLSV:

- SYSSAT

For subtask environments you must define the following STEPLIB in the appropriate SATP*vrs* member in SYSSATU:

```
<prefix> SATENV   STEPLIB1=(SYSEXT,[dbid],[fnr],[CIPHER],[password])
                  STEPLIB2=(SYSNCLCO,[dbid],[fnr],[CIPHER],[password])
                  STEPLIB3=(SYSNCLPI,[dbid],[fnr],[CIPHER],[password])
```

8 External Security Definitions

This chapter covers the following topics:

z/OS

If Entire System Server is installed with an external security system (RACF, ACF2, TOP SECRET), a user ID identical to the <ESYUSER> parameter must be defined in the security system. (The <ESYUSER> parameter is described in the section ***Mandatory Parameter Blocks and Parameters for Entire Event Management***). The user must have access to the system console and write access to the Backup Files.

BS2000/OSD

A user ID identical to the <ESYUSER> parameter must be defined to the operating system and must have sufficient authorization to access the system console and to write to the Backup Files. (The <ESYUSER> parameter is described in the section ***Mandatory Parameter Blocks and Parameters for Entire Event Management***).

9 Logging on to Entire Event Management for the First Time

1. Start Natural.
2. Log on to the library SYSNCL.
3. Run the MENUNCL/MENU program.

   The main menu program is called MENUNCL and resides in the library SYSNCL. MENU can also be invoked, but it resides in the library SYSSAT, from where it invokes the product-specific menu program.

   In environments with Natural Security, SYSSAT is always a steplib for SYSNCL, so that MENU will be found in SYSSAT. Use DBA as your user ID for the first logon. This user ID is added automatically to System File 2 as long as no other users are defined or no user with Administrator authorization can be found.

   If you are not using Natural Security, you have access to Entire Event Management with any user ID as long as DBA is the only user ID defined in Entire Event Management. If this is not the case, your user ID must be defined in Entire Event Management.

   If in a non-security environment MENU should be called instead of MENUNCL, you should perform one of the following changes:

   - Copy MENU from SYSSAT to SYSNCL
   - Change the direct invocations of MENU to MENUNCL.

     Example: STACK=(LOGON SYSNCL;MENUNCL)
4. You can now create your own object definitions in Entire Event Management System File 2 or proceed as described in the section *Importing Example Definitions*.

10 Importing Example Definitions

If you want to load or expand your Entire Event Management System File 2 with the example definitions provided with NCL*vrs*.SYSE, adapt JCL E-IMSYS2 provided with the source library and run the customized job. The LFILEs must be specified within this job.

This job invokes the Entire Event Management Import / Export Utility to load the definitions provided in the sequential file NCL*vrs*.SYSE into Entire Event Management System File 2.

Note: The user ID indicated by the Natural system variable `*USER` must be defined in the Entire Event Management System File 2 with Administrator authorization, i.e. without a linked Profile that restricts authorization.

11 Define Entire Event Management Server in the Online Environment

For each Entire Event Management Server in your system configuration, you must perform the following steps:

Add the Node Definition

Add the Node with the direct command ADD NODE<*vrs*>. The following screen appears:

Add Entire System Server Node

```
12:56:34                *** ENTIRE EVENT MANAGEMENT ***               30.05.06
                       - Add Entire System Server Node -

  Node ..... ___                                created ...
> Comment .. ____________________________________ modified ..

  Name ..................... ____________________

  Time Difference .......... __ hour(s)









NCL0644 Please enter Number to add Entire System Server Node.
 Command =>   ____________________________________________________________________
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help        Exit  Flip  Do                                        Menu
```

In the Machine field, enter the machine name used in the Machine column of the Logical Console (see also the section *Add a Logical Console Layout* in the section *Defining the Logical Environment* of the *Entire Event Management User's Guide*).

To save the Node definition

- Press PF5 (Do) or enter DO on the command line and press Enter.

  A message confirms that the new node has been saved:

```
New Entire System Server Node (number) created.
```

Add the Server Definition

Define a Server on this Node with the direct command ADD SERVER<*vrs*>. The following screen appears:

Add Server Parameters

```
09:39:04                *** ENTIRE EVENT MANAGEMENT ***               30.05.06
                           - Add Server Parameter -

  Server ... 148 P-ESY                         created ...
> Comment .. ____________________________________ modified ..

  Logical Console .... ________ ________ ________ ________ ________ ________
                       ________ ________ ________ ________ ________ ________
                       ________ ________ ________ ________ ________ ________
                       ________ ________ ________ ________ ________ ________
                       ________ ________ ________ ________ ________ ________

  Log DBID/FNR ....... ___ ___  (NCLSYSF3)    > Suppressed Messages
  ET Threshold ....... 10 Msg or __3 MIN
  Delimiters ......... ,=;_______              + Automation Parameters

  Collect Wait Time .. __1 SEC                 + Installation Backup File
  Msgid Exit ......... ________
  Init. Exit ......... ________                + Miscellaneous


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

You must enter parameters for the following fields:

- **Logical Console**
  Enter the Logical Consoles to be served by the Server.
- **Log DBID/FNR**
  Enter Log DBID/FNR (System File 3) to which Server routes messages to be logged. Make certain that this pointer coincides with the pointer to System File 3, which is provided with the appropriate LFILE assignment in the NATENV parameter block (see the section *Mandatory Parameter Blocks and Parameters for Entire Event Management*).

- **Msgid Exit**
  Enter the name of the CALLNAT program to be used in the Collect Task for constructing the message ID from the message text. YMSGID in the SYSNCLSV library provides an example which uses the first token of the message text as ID.

  BS2000/OSD: For BS2000/OSD, the Exit YID-BS2 is provided and should be specified here.

- **Init. Exit**
  Enter the name of the CALLNAT program to get control during startup of the Collect Task. The YINIT subprogram in the SYSNCLSV library provides an example which forwards an initialization message to the Analysis Task via the Event API.

  Save the Server definition with the command DO.

Create Backup Files

For every Server defined in Entire Event Management, two Backup Files must be installed to temporarily hold the Server definitions. You can allocate these files online, if the Entire System Server indicated by the Server node number is currently running.

Place the cursor on +Installation Backup Files on the Add Server Parameters screen and press Enter.

A window opens according to the operating system on which the Entire System Server runs. In this window you can allocate files online :

Add Server Parameters - Install Backup Files - window for z/OS

```
09:54:24                *** ENTIRE EVENT MANAGEMENT ***               30.05.06
                           - Add Server Parameter -
  Server ... 148 P-ESY                          created ... 30.05.2006
> Comment  ------------------------------------------------------------------
           !                     - Install Backup Files -                     !
  Logical  !                                                                  !
           !   Prefix ...... ___________________________________              !
           !                                                                  !
           !   Definition File 1                                              !
           !     Name ...... .SV148.BACKUP1                                   !
           !     Status ....                                                  !
  Log DBID !     Volume .... ______   Space .... ___ ___ ___                  !
  ET Thres !                                                                  !
  Delimite !   Definition File 2                                              !
           !     Name ...... .SV148.BACKUP2                                   !
  Collect  !     Status ....                                                  !
  Msgid Ex !     Volume .... ______   Space ....                              !
  Init. Ex !                                                                  !
           ------------------------------------------------------------------
NCL2262 Please Confirm execution.
 Command ===> ____________________________________________________________________
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help        Exit  Flip  Conf                                      Menu
```

Add Server Parameters - Install Backup Files - window for BS2000/OSD

```
09:54:24                *** ENTIRE EVENT MANAGEMENT ***               30.05.06
                            - Add Server Parameter -
   Server ... 148 si14                        created ... 30.05.2006
 > Comment  ------------------------------------------------------------------
            !                     - Install Backup Files -                     !
   Logical  !                                                                  !
            !   Prefix ...... $SAG.NCL_____________________                    !
            !                                                                  !
            !   Definition File 1                                              !
            !     Name ...... $SAG.NCL.SV148.BACKUP1                           !
            !     Status .... ESY5722 Requested data set not found.            !
   Log DBID !     Space ..... _5_ _5_ ___                                      !
   ET Thres !                                                                  !
   Delimite !   Definition File 2                                              !
            !     Name ...... $SAG.NCL.SV148.BACKUP2                           !
   Collect  !     Status .... ESY5722 Requested data set not found.            !
   Msgid Ex !     Space .....                                                  !
   Init. Ex !                                                                  !
            ------------------------------------------------------------------
NCL2262 Please Confirm execution.
 Command ===> ____________________________________________________________________
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help        Exit  Flip  Conf                                      Menu
```

Prefix Field:

Enter the prefix for the name of the Backup Files. This must be identical to the value of the NCLENV parameter <NCLSEQF> (see the section *Define Environment for Entire Event Management Server*).

For example, $SAG.NCL is the prefix in NCLENV for the above shown BS2000/OSD environment.

The following fields are operating-system-dependent:

Space Field - z/OS

Enter the value for the primary space in the first field.

Enter the value for the secondary space in the second field.

Enter the unit for the given values in the third field.

Space Field - BS2000/OSD

Enter the value for the primary space in the first field.

Enter the value for the secondary space in the second field.

Leave the third field blank.

Volume Field - z/OS and z/VSE

Enter the volume on which the sequential files are to be allocated.

Ext. Start Field - z/VSE only

Enter the start FBA block number or CKD track number for the sequential files *<prefix>*.SV*<vrs>*.BACKUP1.HD and *<prefix>*.SV*vrs*.BACKUP2.HD respectively.

If you leave this field blank, z/VSE selects the block or track number for the backup files; alternatively, you must specify a block or track number for Backup File 2 according to the required space.

Space Field - z/VSE only

Enter the number of tracks needed for the sequential file. The following sequential files are then allocated with the space indicated:

Sequential File	Number of Tracks
<prefix>.SV*<vrs>*.BACKUP1.HD	1 track
<prefix>.SV*<vrs>*.BACKUP1	as required
<prefix>.SV*<vrs>*.BACKUP2.HD	1 track
<prefix>.SV*<vrs>*.BACKUP2	as required

Confirm the allocation by entering CONFIRM in the Command ===> line and pressing Enter.

Note: The Entire System Server node *<vrs>* must be active to perform this file installation.

If you use another method of allocating the files, use the following attributes:

File Allocation	Attribute
File name	*<prefix>*.SV*<vrs>*.BACKUP1 and BACKUP2 (*vrs*=node number of server)
DSORG	PS
LRECL	253
BLKSIZE	253 (must be the same as LRECL for the moment)
RECFM	FB.

The following table should be used to estimate the space required. (If you do not want to estimate the space, start with a value of 1CYL). It gives the number of records needed for each type of object definition contained in the data base:

Entity Definition	No. of Records
Server Parameter	8
Message Range	4
Logical Console	1
Event	4
Action	1

In addition on z/VSE, the sequential header files <*prefix*>.SV<*vrs*>.BACKUP1.HD and <*prefix*>.SV<*vrs*>.BACKUP2.HD must be allocated with the same attributes and with one track for each file.

Using NET-Type Actions

If you want to use NET-type Actions that must interface with Entire Operations, define the Entire Operations System Library (SYSEOR) as a STEPLIB for SYSNCL and SYSNCLSV.

Using NAT-Type Actions

If you want to use NAT-type Actions, you must define a default Action Library.

To do this

1 Place the cursor on +Automation Parameters and press Enter.

The following window opens:

Add Server Parameters - Automation Parameters

```
10:21:57               *** ENTIRE EVENT MANAGEMENT ***               30.05.06
                           - Add Server Parameter -

  Server ... 148 P-ESY                          created ... 30.05.2006
> Comment  ------------------------------------------------------------------
           !                    - Automation Parameters -                     !
  Logical  !                                                                  !
           ! Rule Timeout .......... _30 SEC     Loop Criterion _             !
           ! Rule Locktime ......... ___ ___     Loop Frequency _10           !
           !                                     Resumetime ... ___ ___       !
           ! Action Program Library                                           !
           !   Database Nr ......... ___                                     !
  Log DBID !   File Nr ............. ___                                     !
  ET Thres !   Library ............. ________                                !
  Delimite !                                                                  !
           ! Initial Size of Active Queues                                   !
  Collect  !   Root Events ......... _________                               !
  Msgid Ex !   Dependent Events .... _________                               !
  Init. Ex !                                                                  !
           ------------------------------------------------------------------

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

2 Enter Database Nr, File Nr and Natural Library name of the FUSER where NAT-type Actions are located.

If you omit Database Nr and File Nr, the FUSER currently defined takes effect.

3 Copy the program EXNAT--P from the SYSNCLSV library to your defined Action Library using the Natural SYSMAIN utility. Use this as a program frame or as an example to build your own NAT-type Actions.

If Natural Security is installed, the User ID indicated by the <NSCUSER> parameter must be linked to the Action Library if the Action Library is defined as people-protected.

12 Installation Verification

To verify that an Entire Event Management Server, identified by node number vrs, has been installed correctly, proceed as follows:

1. Check the environment defined for the Entire Event Management Server:
   - Verify the startup parameters defined in the library SYSSATU.
     - Logon to the library SYSSATU where you keep your master definitions for all Servers of the SAT family.
     - Check that the SATvrs entry in the member SATDIR points to the correct FNAT for the application SYSSAT.
     - Check member SATP*vrs* for the SATSTART entry with PRODUCT=NCL. The TYPE parameter must have the value SUBTASK; the APPLIB parameter must have the value SYSNCLSV, and the SERVSYSF parameter must point to the correct Entire Event Management System File 2 where the object definitions assigned to the Server are kept. PRODUCT and PREFIX together must identify the prefix of the parameter blocks specific to this Entire Event Management Server.
     - Check member SATP*vrs* and the member <NCLPARMS> indicated by the MEMBER parameter in SATP*vrs* for the SATENV parameter NATTASK. The value in effect for the Entire Event Management Server *vrs* must indicate the correct Natural subtask module which is intended to run the Entire Event Management Server.

       This Natural module must be correctly linked, marked REENTERABLE and REUSABLE, and must be accessible in the run time environment of the Entire System Server node *vrs*.
     - Check member SATP*vrs* and/or member <NCLPARMS> indicated by the MEMBER parameter for the parameter NCLSEQF in the NCLENV block. This parameter must point to two sequential files with the names <NCLSEQF>.SV*vrs*.BACKUP1 and <NCLSEQF>.SV*vrs*.BACKUP2 respectively. These files must be allocated and for the first startup must either both be empty or must consist of only one record containing the string NEW. On z/VSE, the sequential files <NCLSEQF>.SV*vrs*.BACKUP1.HD and <NCLSEQF>.SV*vrs*.BACKUP2.HD must also be allocated.

- Check the member SATP *vrs* and/or the member <NCLPARMS> indicated by the MEMBER parameter for the SATENV parameters NSCUSER, NSCPSWD and ESYUSER. If you use Natural Security, <NSCUSER> must be defined as user and must have access to the library SYSNCLSV and to the Action Program libraries.

  If Entire Security Server is running with security, (i.e.: SECURITY<>NONE), the user ID indicated by <ESYUSER> must be defined in the external security system and have sufficient authorization.

- Verify the Server Parameters defined with the object Server *vrs*.
  - Log on to the library SYSNCL and invoke the MENUNCL or MENU program (see ***Logging on to Entire Event Management for the First Time***).
  - Type in the direct command MODIFY SERVER *vrs*. On the **Modify Server Parameter** screen verify that the Log DBID/FNR parameter points to the correct Entire Event Management System File 3, where the Server should log the console messages.

    Link at least one Logical Console to the Server.
  - Invoke the Miscellaneous window by typing MISC as a direct command and pressing Enter. The following window opens:

Modify Server Parameters - Miscellaneous Server Parameters

```
10:30:12               *** ENTIRE EVENT MANAGEMENT ***              30.05.06
                          - Modify Server Parameter -
   Server ... 148 P-ESY                        created ... 30.05.2006
 > Comment  ------------------------------------------------------------------
            !              - Miscellaneous Server Parameters -              ↩
  !
   Logical  !                                                               ↩
  !
            ! Write to (Udf) Console from . 00:00 to 00:00                   ↩
  !
            !                                                               ↩
  !
            ! API Receiver Service ........ _________________               ↩
  !
            !     Wait before retry ....... ___ ___                         ↩
  !
            !                                                               ↩
  !
   Log DBID ! Perform SYS3-Cleanup at ..... 06:00   Trace the Cleanup _     ↩
  !
   ET Thres !                                                               ↩
  !
   Delimite ! Prefix of (Log) Messages .... NCL                             ↩
  !
            ! Write (Log) Messages                                          ↩
  !
   Collect  !  to Logical Consoles .............. X                        ↩
  !
   Msgid Ex !  to Physical Console .............. _                        ↩
  !
   Init. Ex !  to Server Task Sysout ............ X                        ↩
  !
           ------------------------------------------------------------------

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

- To prepare for step (2) below, establish a non-empty time frame for logging messages to the (Udf) Console. The Server should then log all messages to its (Udf) Console which are not covered by your own Logical Console definitions.

2. Start the Entire Event Management Server.
   - In the Entire Event Management online system, type in the direct command MONITOR STATISTICS *vrs* to invoke the Server Statistic Monitor screen:

Server Statistic Monitor

```
10:35:22               *** ENTIRE EVENT MANAGEMENT ***              30.05.06
Srv    *                 - Server Statistic Monitor -

Server . . . 114 F-Mc              NPR Lost      Statistics:
                                                   Refreshed
       Main                      API Receiver      Interval
     +----------+                +----------+
---->! INACTIVE !                ! UNKNOWN  !
     +----------+                +----------+
                                      0 v
                Collect            Analyze          Logging           Action
              +----------+     +----------+     +----------+     +----------+
              ! INACTIVE !---->! INACTIVE !---->! INACTIVE !  -->! INACTIVE !
              +----------+     +----------+  !  +----------+  !  +----------+
                                             ----------------->
               total 1/sec      total 1/sec      total 1/sec      total 1/sec
executed . .         0   0.0          0   0.0          0   0.0          0 0.000
suppressed .         0   0.0          0   0.0
Events . . .                          0 0.000
Traffic  . .          100 %     . .   0.00 %     . .   0.00 %     . .  0.000 %
NCL2255 Service by Server 114 not available.
Command ===> ____________________________________________________________________
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help  Auto  Exit  Flip  Rfrsh                                      Menu
```

- If the status of the Server (directly under the heading Server Statistic Monitor) is NPR Lost (like in example above), proceed with step 3. to start the Entire Event Management Server together with the Entire System Server.
- If the Status of the Server is NPR Act, proceed with step 4., below, to start the Entire Event Management Server online.

3. Start the Entire Event Management Server automatically with Entire System Server.

   If the SATSTART block for the Entire Event Management Server in the SYSSATU member SATP*vrs* is provided correctly, the Server is started automatically with the Entire System Server node *vrs*.

   - Start Entire System Server node *vrs*.
     - The successful start of the Entire System Server is indicated by the console message:

```
Entire System Server IS READY - X-COM NODE vrs IS INITIALIZED
```

- The successful start of the Entire Event Management Server is indicated by the following console message sequence:

```
NCL5001 CS0000-P Task NCMAINlllllkkkkk invoked successfully
NCL5001 CS0000-P Task NCLOGGlllllkkkkk invoked successfully
NCL5001 CS0000-P Task NCACTNlllllkkkkk invoked successfully
NCL5001 CS0000-P Task NCANLSlllllkkkkk invoked successfully
NCL5001 CS0000-P Task NCGETMlllllkkkkk invoked successfully
 ↩
```

  where *lllll* and *kkkkk* indicate the DBID and FNR of Entire Event Management System File 2

- If this sequence does not appear after a while:
  - Check the SYSOUT files of the Entire System Server node, if it is running on the z/OS or z/VSE operating systems.
  - If the Entire Event Management Server is running on BS2000/OSD, check the SYSLST protocol files matching the following naming convention - the file name must contain the substring:

```
L.NCLxxvrs
```

    where *xx* stands for the Entire Event Management subtask and *vrs* for the Server number.

```
xx = MA   Main Task
     LO   Logging Task
     AC   Action Task
     AN   Analysis Task
     GE   Collect Task
 ↩
```

  - Proceed with step 5.

4. Start the Entire Event Management Server online.
   - In the Entire Event Management online system, type the direct command START SERVER *vrs* and press Enter. The Start Server window opens:

Server Start

```
 10:36:50               *** ENTIRE EVENT MANAGEMENT ***              30.05.06
 Srv    *                        - Main Menu -


   Console ------------------------------------------------------------------
           !                        - Server Start -                         ↩
!
     1  Log !                                                                 ↩
!
     2  Ser ! Server  . . . . . . 114  F-Mc      MVS/ESA   NPR Act           ↩
!
           !                                                                  ↩
!
           ! Task States                                                      ↩
!
    Adminis !   Main Task . . . . INACTIVE                                   ↩
!
           !   Collect Task  . . INACTIVE                                     ↩
!
     3  Env !   Analysis Task . . INACTIVE                                   ↩
!
     4  Aut !   Logging Task  . . INACTIVE                                   ↩
!
     5  Aut !   Action Task . . . INACTIVE                                   ↩
!
     6  Cal !                                                                ↩
!
           ! Backup File . . . . NCL.SYSF.SV114.BACKUP2                       ↩
!
     .  Exi ! Renewed . . . . . . 96-05-29 15:42:36                         ↩
!
     ?  Hel !                                                                ↩
!
    *  Com ------------------------------------------------------------------
 NCL2262 Please Confirm execution.
 Command ===> ____________________________________________________________
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help        Exit  Flip  Conf                                      Menu
```

- Confirm your start request by typing the direct command CONFIRM and pressing Enter.
- Proceed with step 5.

5. Monitoring the Entire Event Management Server.
   - In the Entire Event Management online system, type the direct command MONITOR STATISTICS *vrs* and press Enter. The **Server Statistic Monitor** screen appears.

- After a while the status of each Server subtask should be indicated in the appropriate box as either RUNNING or WAITING and the status of the Entire Event Management Server in total should be indicated as NCL Act directly under the heading Server Statistic Monitor.
- In addition, since you have enabled (Udf) Console in step 1, the statistic line executed should, after a short delay, show values greater than 1 under the Collect, Analyze and Logging boxes.

- If the subtask status and values do not change, issue any operator command to the Entire System Server node *vrs* by typing the direct command:

```
OPER vrs <operator command>
```

- If the Monitor still shows no message traffic, the interface to the system console is most probably not installed correctly. Therefore, make sure that the Entire System Server view CONSOLE is correctly installed (see the section ***Verify Entire Event Management Interfaces for Message Collection***).

13 Maintaining the Logging Database

Entire Event Management automatically maintains the messages logged to System File 3 according to the following logic:

- External messages are logically deleted from user-defined consoles, if their time stamp is older than the current time minus the lifetime of the respective Logical Console. They are physically deleted, if there is no reference left to a Logical Console.
- External messages routed to the Server-related (Udf) Consoles are physically deleted, if they are older than 1 day.
- For each Server <*vrs*>, the messages routed to its (Act<*vrs*>), (Aut<*vrs*>) and (Log<*vrs*>) are physically deleted, if they are older than those respective Server start messages, which are older than the oldest external message left over after deletion.

For z/OS

Message maintenance is performed in a separate subtask of the Server which can be started automatically every day by setting up the schedule time in the Server parameter Perform SYS3 Cleanup at (see the section *Miscellaneous Server Parameters*) in section *Defining the Physical Environment*.

The name of the subtask is NCLCLNP-*iii*-*jjj*, where *iii* represents the DBID and *jjj* the FNR of the System File 2 currently being used by the Server. The result can be viewed in the assigned SYSOUT file.

For BS2000/OSD

Message maintenance is performed in a separate job which can be started automatically every day by setting up the schedule time in the Server parameter Perform SYS3 Cleanup at (see the section *Miscellaneous Server Parameters*) in section *Defining the Physical Environment*.

It is named NCLCL*vrs*, where *vrs* stands for the Node number of the Server. The result can be viewed in the protocol file of the job NCLCL*vrs*.

In addition, the user can start the maintenance utility manually by submitting the customized JCL provided with the member ESYS3DEL of NCL*vrs*.SRC.