

Installation / Migration Procedure for NOP

This subsection covers the following topics:

- Step1: Load System Files
 - Step 2: Load System Objects and Error Messages
 - Migration from NOP Versions before 321 to NOP 411
 - Migration from NOP 321 to NOP 411
 - Step 3: Install the Entire Operations Monitor
 - Step 4: Adapt SAT Parameters for Entire Operations
 - Notes about the Migration of Log Data to the SAT Log File Format
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Step1: Load System Files

Job I050, Steps 2100/2102

Entire Operations System File 1

Entire Operations System File 1 holds all definitions and information needed to control the batch job processing. The file supplied on the installation tape contains some examples. If you do not want these examples, load the file with the ADALOD parameter NUMREC=0.

Step 2: Load System Objects and Error Messages

Job I051

Note:

This runs only if an Entire Operations version less than 4.1.1 was installed.

Job I051, Step 2100 deletes old objects starting with NOP* in the SYSTEM library on FNAT and FUSER.

Step 2101 deletes all objects of the previously installed version from the SYSEOR library.

Job I061

Use the Natural system command INPL (which is described in the **Natural Reference Documentation**) to load the Entire Operations system objects (file NOPnnn.INPL, Job I061, Step 2100).

The following libraries are loaded:

Library	File	Contents
SYSEOR	FNAT	Entire Operations Programs
SYSEORH1	FNAT	Entire Operations Help Data (English)
SYSEORH2	FNAT	Entire Operations Help Data (German)
SYSTEM	FUSER	Entire Operations Programs starting with NOP...
SYSEORU	FNAT	Entire Operations Example User Routine

Load the Entire Operations error messages file (file NOPnnn.ERRN) using the ERRLODUS utility in Step 2102. The ERRLODUS utility is described in the section **SYSERR Utility** of the **Natural Utilities Documentation**.

Job I082, Step 2111

Copy module MENU from library SYSSAT to library SYSEOR (in non-security environments only).

For existing Entire Operations installations, the following migration paths are possible:

Job I082, Steps 2104-2109

From Version	To Version	Use Job, Steps
NOP 311	NOP 321	I082 2104, 2105
NOP 321	NOP 411	I082 2107, 2109

Migration from NOP Versions before 321 to NOP 411

Job I082, Steps 2104, 2105

1. For System File 1, Step 2104:

Field	Length (3.1.1)	Length (3.2.1)	Remarks
BZ	10	20	length modified
C7	8	20	length modified
CJ	10	20	length modified
DL	3	8	length modified
EM	16	20	length modified
F4	16	20	length modified
I9	10	20	length modified
KD	8	20	length modified
KH	10	20	length modified
VM	8	20	length modified

2. For System File 1, Step 2105: The field **Y2** will be made a descriptor: it will be inverted.

It is also possible to use the NOP Import / Export Facility to migrate the data of the System File 1.

The log data must be migrated as described under Migration from NOP 321 to NOP 411.

Migration from NOP 321 to NOP 411

- Migration of System File 1
- Migration of Log Data from NOP Versions before 411 to Version 411 and above
- Migration of SAT Log File

Job I082, Steps 2107, 2109

Migration of System File 1

Backup System Files 1 and 2. The following changes will be performed on System File 1. This job contains 2 steps:

1. For System File 1, Step 2107:

Field	Length (3.2.1)	Length (4.1.1)	Remarks
A0	U 4 NU	U 5 NU	
AK	U 3 NU	U 5 NU	
AS	A 54 NU	A 70 NU	
DG	A 6 NU	A 8 NU	
F1	-	P 7 DE NU	new, descriptor
FX	U 7 NU	U 9 NU	
FZ	U 7 NU	U 9 NU	
HZ	-	A 8 NU	new
IF	P 7 DE NU	P 7 NU	descriptor released
JA	-	A 10 NU	new
JB	-	A 10 NU	new
JC	-	A 10 NU	new
JD	-	P 7 NU	new
JE	-	A 10 NU	new
JF	-	A 20 DE NU	new, descriptor
JG	-	A 20 DE NU	new, descriptor
JH	-	A 10 NU	new
JI	-	A 10 NU	new
JJ	-	A 10 NU	new
JK	-	P 7 NU	new
JL	-	A 10 NU	new

2. For System File 1, Step 2109:

Field	Length (3.2.1)	Length (4.1.1)	Remarks
GP	-	A 67 NU	new, superdescriptor supde= 'GP=JA(1,10),JB(1,10),JC(1,10),JD(1,7),JE(1,10),JF(1,20)
GR	-	A 47 NU	new, superdescriptor supde= 'GR=JH(1,10),JI(1,10),JJ(1,10),JK(1,7),JL(1,10)'
GS	-	A 18 NU	new, superdescriptor SUPDE='GS=B9(1,11),IF(1,7)'

Note:

After migration of the NOP System File 1, please invoke the direct command TECH from the NOP command line to update the internal version control record.

Migration of Log Data from NOP Versions before 411 to Version 411 and above

Note:

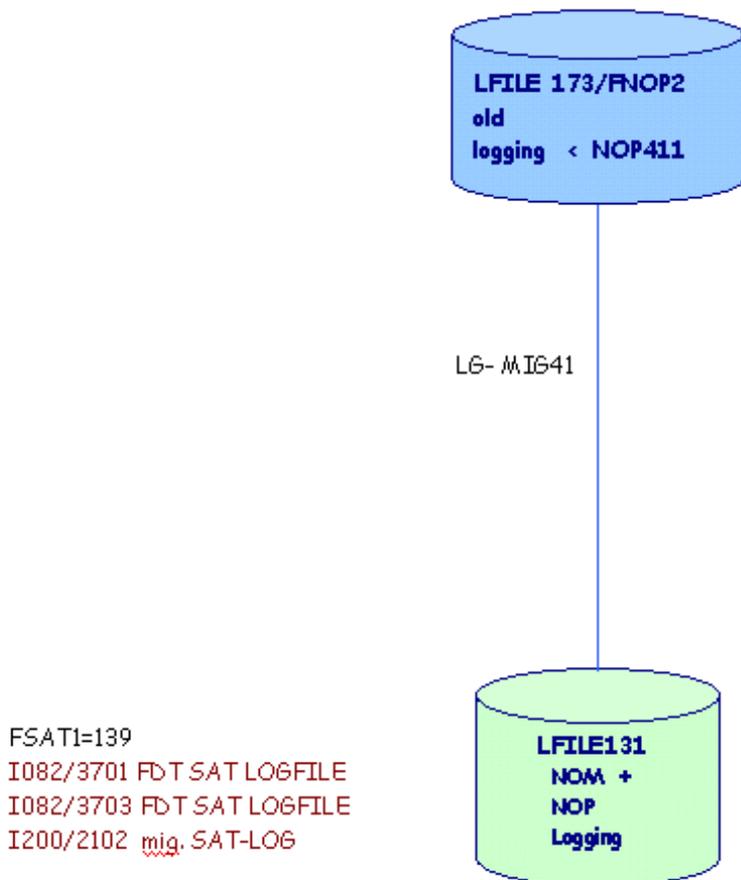
The migration of log data may be run **only** if both the old and the new NOP Monitors are **not running**.

For additional information about the migration of log data, please refer to the Installation Notes.

If a common SAT log file is to be used (OS/390, VSE/ESA, BS2000/OSD):

- The SMA Parameter **NOP-OWN-LOGFILE** must be set to **NO**.
This parameter does not apply to BS2000/OSD.
- If the SAT log file was installed with SAT 311 and NOM 211, it must be adapted for the common usage with NOP.
For FDT changes, the following jobs will be executed :
 1. **I082/3701**, FDT SAT Log (part of SAT installation)
 2. **I082/3703**, FDT SAT Log (part of SAT installation)
 See Migration of SAT Log File.
- For SAT LOG migration, the following job will be executed:
 - **I200/2102**
FSAT1=139 will be used.

I Logging BS2000



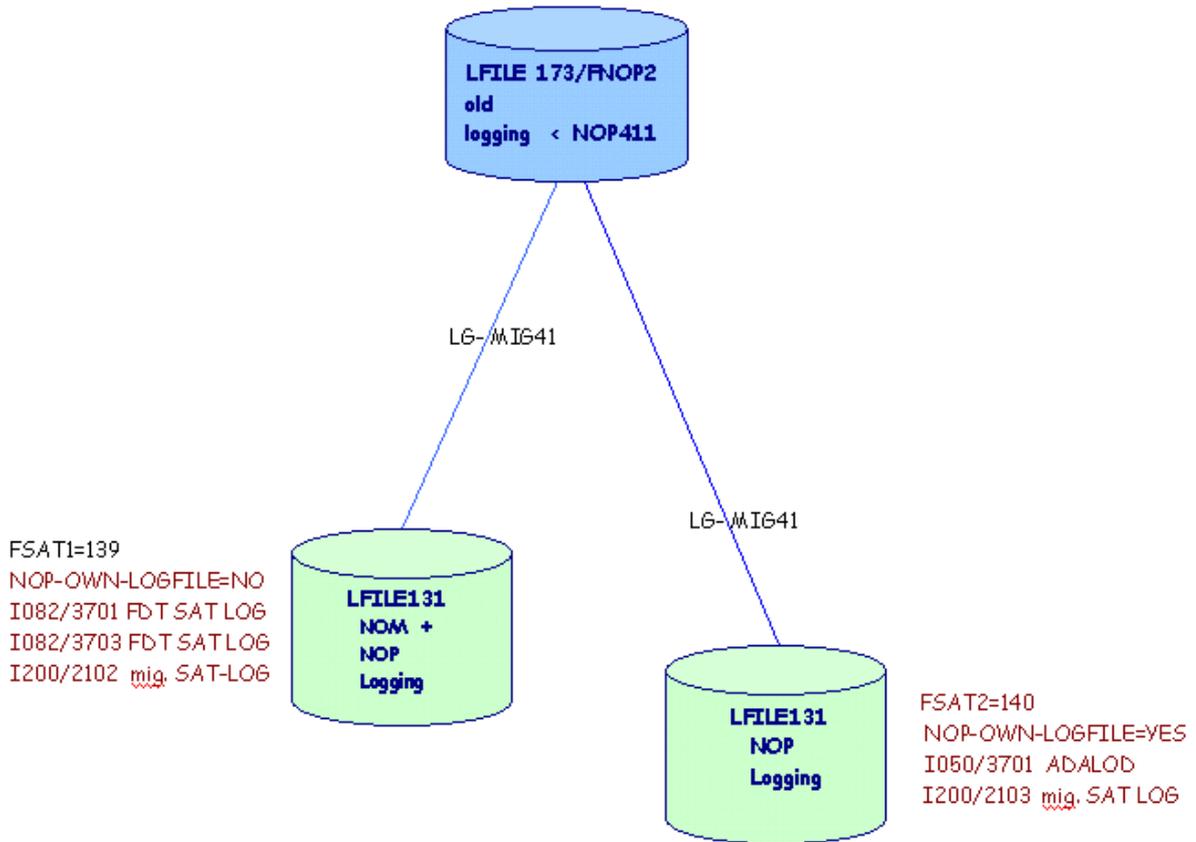
Note:

This is the recommended procedure for BS2000/OSD.

If separate SAT log files shall be used (OS/390, VSE/ESA):

- The SMA Parameter **NOP-OWN-LOGFILE=YES** must be set. FSAT2=140 is a new NOP logging file. This parameter does not apply to BS2000/OSD.
- The following jobs will be executed:
 1. **I050/3701**, ADALOD (FSAT2)
 2. **I200/2103**, migration SAT Log
 FSAT2=140 will be used.
- For additional information about the usage of separate log files for different ESM products, please refer to the Installation Notes.

Logging OS/390 and DOS/VSE



Note:
For BS2000/OSD, these steps must be executed manually.

Migration of SAT Log File

This step is necessary only if a SAT log file has been installed with NOM 211 and SAT 311 already.
Backup the existing SAT log file. The jobs to perform this migration are included in the procedure above.

Job I082 Step 3701

Field	Length (SAT 3.1.1)	Length (SAT 3.1.2)	Remarks
AU	-	A 8 NU	new field

Job I082 Step 3703

Field	Length (SAT 3.1.1)	Length (SAT 3.1.2)	Remarks
S8	-	A 30 DE NU	new, superdescriptor supde='S8=AB(1,10),AG(1,20)'

Step 3: Install the Entire Operations Monitor

The following additional definitions are required in the Natural parameter modules for online and batch (=Monitor):

NTFILE	ID=216,DBID=<DBID-216>,FNR=<FNR-216>	Entire Operations System File 1
NTFILE	ID=131,DBID=<DBID-131>,FNR=<FNR-131>	SAT Log File
NTFILE	ID=215,DBID=<DBID-215>,FNR=<FNR-215>	Entire Operations System File 3 (optional) ¹
NTFILE	ID=206,DBID=<DBID-206>,FNR=<FNR-206>	Entire Output Management System File (optional)
NTFILE	ID=251,DBID=<DBID-251>,FNR=<FNR-251>	Con-nect File (optional)

¹ Entire Operations System File 3 is the Log Selection File. This file is required only if you use the extraction of log data described in Special API Routines for Entire Operations in the Entire Operations User's Guide.

Note:

The NTFILE settings can be overridden at any time by dynamic LFILE definitions in the SAT NATENV subsection for the Entire Operations Monitor.

Step 4: Adapt SAT Parameters for Entire Operations

- Mandatory Parameter Blocks/Parameters
- Specific Parameters
- Example

Mandatory Parameter Blocks/Parameters

Param. Block	Parameter	Description
SATENV	NSC=YES/NO	Indicates whether Natural Security is installed or not.
	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.
SATSTART	SATVERS=31	The Entire Operations Server startup program must use SAT version 3.1.2.
	PRODUCT=NOP	3-byte product code.
	PREFIX=	PRODUCT and PREFIX are compressed into a prefix which identifies the Server-specific parameters.
	TYPE=BATCH/SUBTASK	Entire Operations Servers can be started as subtasks or batch jobs. ¹
	APPLIB=SYSEOR	Name of the Natural library where Entire Operations Server is installed.
	SERVSYSF=	DBID and file number for Entire Operations System File 1 (must be unique within all SATSTART instructions of this node).
NATENV	LFILE=(216,<NOPSYSF1-DBID>,<NOPSYSF1-FNR>) ^{2,4}	
	LFILE=(131,<SAT-LOG-DBID>,<SAT-LOG-FNR>) ^{3,4}	
	ID=','	Input delimiter.
	IM=D	Input mode.

¹ Under BS2000/OSD these subtasks are simulated by Entire System Server.

² Pointer to Entire Operations System File 1

³ Pointer to SAT Log File.

⁴ These pointers can be alternately set in the common NATPARM module created for the SAT products or in a Natural parameter profile indicated by the Natural parameter PROFILE.

Specific Parameters

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

<Prefix> = NOP+<Prefix from SATSTART block>

Parameter Block	Parameter
SATSTART	MEMBER= ¹

¹ You can specify a member where Entire Operations-specific parameters are located.

Example

- SAT Environment Settings
- Natural Environment Settings
- Product Automatic Start

SAT Environment Settings

SAT	SATENV	NATTASK=NSATT08, NATBATCH=NAT315BA, NATSKEL=EORJSMVS, NSC=YES, NSCUSER=EORMON, NSCPSWD=EORMON1	
NOP411	SATENV	NATTASK=NSATT08, NATBATCH=NAT315BA, NATSKEL=EORJSMVS, NSC=YES, NSCUSER=EORMON, NSCPSWD=EORMON1	/* SYSEOR 411 SUBTASK
NOPBAT	SATENV	NATTASK=NSATT08, NATBATCH=NAT315BA, NATSKEL=EORJSMVS, JOBPREF=SN, NSC=NO	/* SYSEOR 411 BATCH /* OPS.SYSF.PROD.LOAD /* JOB NAME PREFIX

Natural Environment Settings

SAT	NATENV	DU=OFF	
NOP411	NATENV	FUSER=(9,90),FNAT=(9,80),FSEC=(9,83), MAXCL=0,MADIO=0,MT=0,AUTO=OFF, IM=D,ID=',', WH=ON, LFILE=(216,9,89), LFILE=(131,9,23), LFILE=(251,21,16), LFILE=(206,9,111), LFILE=(204,9,80)	/* SYSEOR SYS 1 /* SAT LOG /* CNT SYSF /* NOM SYSF /* SYSSATU FNAT
NOPBAT	NATENV	PARAM=E31122BP,IM=D,AUTO=OFF FUSER=(9,90) LFILE=(204,9,80)	/* SYSSATU FNAT

Product Automatic Start

SAT * *	SATSTART	SATVERS=31, PRODUCT=NOP, PREFIX=411, TYPE=SUBTASK, PREFIX=411, TYPE=BATCH, APPLLIB=SYSEOR, SERVSYSF=(9,89)	/* SYSEOR 411 SUBTASK /* SYSEOR 411 BATCH
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For an explanation of the SAT parameters, see the description of System Automation Tools in the separate SAT Documentation.

Notes:

1. NOP411 and NOPBAT are the proposed names for SYSEOR SUBTASK and SYSEOR BATCH and can be modified.
2. If Natural Security is installed, specify AUTO=OFF in NATENV; if not installed, specify AUTO=ON.