



# Entire Operations

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Version 4.1.1

Release Notes

This document applies to Entire Operations Version 4.1.1 and to all subsequent releases.

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

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# Release Notes - Overview

This documentation covers the following topics:

- Release Notes Provides a brief overview of how the current version of Entire Operations differs from the previous version.

# Entire Operations Version 4.1.1 Release Notes

This document supersedes and replaces the Release Notes for the product Entire Operations Version 4.1.1, which was issued as a controlled release in February 2002.

This section covers the following topics:

- Introduction
  - Migrating from Previous Versions
  - Prerequisites
  - Compatibility and Migration
  - SAGSIS Problems
  - Enhancements and New Features
- 

## Introduction

These Release Notes list and explain the enhancements and new features provided with Entire Operations Version 4.1.1. They apply to all of the following supported operating systems, insofar as these operating systems are not dealt with in separate release notes:

- OS/390,
- VSE/ESA,
- BS2000/OSD,
- UNIX (HP-UX, AIX, Sun Solaris) and
- Windows (Intel) (managed node only).

## Migrating from Previous Versions

- Migration of Data
- Menu Program

### Migration of Data

To migrate data from Entire Operations Version 3.1.1 and 3.2.1 to Version 4.1.1 you either:

- Unload the old database files and fill the new database files using the Import/Export Utility.

or

- Adapt the old NOP System File 1 for use with Entire Operations 4.1.1. Some data fields have larger field lengths and some descriptors have been added. This update is not upwardly compatible to Entire Operations versions below 4.1.1.

The old NOP log file (system file 2) must be migrated to the SAT log file format with the utility program LG-MIG41. The SMA job I200, step 2102, can be used for this purpose.

**Note:**

Migration from versions earlier than 3.1.1 is possible via the Import/Export Utility only.

## Menu Program

The MENU program has been replaced by MENUEOR in the library SYSEOR. MENU can still 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 SYSEOR, so that MENU will be found in SYSSAT. In a non-security environment, this may cause a problem when Entire Operations is initially invoked. You should, therefore, perform one of the following changes:

- Copy MENU from SYSSAT to SYSEOR
- Change the direct invocations of MENU to MENUEOR.  
Example: STACK=(LOGON SYSEOR;MENUEOR)

## Prerequisites

Entire Operations 4.1.1 requires

- Adabas Version 7.1.2 or above  
(on UNIX: version 3.1 or above);
- Natural Version 3.1.4 or above including the Software AG Editor component  
(on UNIX: version 5.1 or above);
- Entire System Server Version 3.1.1 or above;
- Entire System Server for UNIX 2.1.1.05 and above (optional, if Entire Operations 4.1.1 is installed on a mainframe system);
- Entire System Server for UNIX 2.1.1.10 and above (if Entire Operations 4.1.1 is installed on a UNIX system);
- System Automation Tools Version 3.1.2 or above;
- Natural Security (same as NAT) (optional);  
(UTM users under BS2000/OSD are required to have Natural Security);
- Entire Network 5.6.1 (optional, for multi-CPU support);
- EntireX Broker Version 5.3.2 for BS2000/OSD or VSE/ESA (optional);  
EntireX Broker Version 5.3.1 for OS/390 (optional);  
EntireX Broker Version 5.3.1 for UNIX or Windows platforms (optional);
- Con-nect Version 3.1 or above (optional).

## Compatibility and Migration

- Previous Versions
- API Versions
- API Functionality Changes
- User Exit Changes
- OS/390: E-mail Sender Names
- Symbol Recognition in JCL
- User Profile: Reporting

## Previous Versions

With the release of Entire Operations 4.1.1, versions 3.1.1 and below are no longer supported. You are, therefore, strongly advised to switch to the current version at your earliest convenience.

## API Versions

Only the latest versions of APIs should be used for new development. These are documented in the section API Routines. Starting with the next NOP version, older APIs will be supported for the two previous versions only. For NOP 411, all API modules contained in the SYSEOR library are officially supported. Most API routines contain a version number as the seventh character of their name.

For example, in the next NOP version the Log API is NOPULW8N. The previous versions NOPULW7N and NOPULW6N will still be supported.

## API Functionality Changes

- Resource Handling

### Resource Handling

Due to the extended resource handling features in Entire Operations 4.1.1, some API functionality has been modified:

	API	Notes
NOPURS1N	User routine for handling master resource definitions.  It is no longer possible to modify the currently used amount of a resource (P-QTY-USED). This field remains in the API parameter list, but it can be used for read access only.  The allocation of resources must now be performed with the new API, NOPURE1N.	
NOPURE1N	User routine for handling resource allocations and deallocations.  This user routine is new in Entire Operations 4.1.1. It can allocate and deallocate resources and query allocations for a given active job or active network.	

## User Exit Changes

- Job Numbers as Parameters for User Exits

### Job Numbers as Parameters for User Exits

User exits for end-of-job check (ESC), end-of-job actions (EPA):

The "old" field P-JOB-NUMBER is filled for ESC and EPA exits, only if the job number is numeric and if it is less than or equal to 99999.

#### Important:

For new development, use the field P-JOB-ID-10 (A10) in NOPXPL-A, because there are job numbers greater than 99999 in z/OS and UNIX and because of BS2000 alphanumeric job IDs. P-JOB-ID-10 has been added to NOPXPL-A.

If an older state of NOPXPL-A is used, you can code:

```
1 #job-id-10 (a10)
...
#job-id-10 := substr(p-condition,1,10)
```

## OS/390: E-mail Sender Names

Sender name creation of e-mail sent by the NOP monitor via z/OS ESY nodes has changed.

The sender names now take the form:

```
Entire Operations (E02) [eor_e02@xceor411.software-ag.de]
```

- **Entire Operations** is a constant string.
- **E02** is the Monitor Subtask Prefix, definable in the Monitor Defaults.
- The string **xceor411** is taken from the parameter IDENTIFIER= of the ESY node used to send the mail.
- The other parts of the e-mail address are generated by the z/OS SMTP interface.

## Symbol Recognition in JCL

Entire Operations now tries to recognize symbols in the JCL of a job, even if no symbol table is defined on the job or network level and the activation and/or submission escape characters are defined.

This change has been made because built-in symbols and symbol functions should be resolvable without a defined symbol table.

## User Profile: Reporting

The parameter "Wildcards in Online Selections" now defaults to "N". To allow wildcards for a user, this setting must be modified.

### Note:

Large amounts of data may result when wildcards are used.

## SAGSIS Problems

All solved problems of Version 3.2.1 and below are included in this release.

## Enhancements and New Features

- New Library Concept
- Job Type DAT
- Symbols: Extension of the Include Function for Text Members
- Symbols: Symbol Setting as End-of-Job Action
- Symbols: Extension of Search Hierarchy
- Symbols: Global and Network Level Exits for 'Symbol not found'
- Resources
- Reporting
- Message Sending by E-mail
- Logging: SAT Log File Replaces NOP Log File
- Additional New Features
- Features no longer supported with this Version

### Implemented Change Enhancements

- CE 2279: Cross Reference for Symbol Table Usage
- CE 2297: Time Frame Modification for Active Jobs on Network Level
- CE 2424: Resource Reservation for Network
- CE 2591: Resource Locking for Longer Periods

- CE 2592: Extend Logical Resources by Physical Resources
- CE 2642: Include JCL in Network and Job Reports
- CE 2739: Input Condition Reference 'Last Workday'
- CE 2866: Resource for Network
- CE 4831: Escape Characters for Symbol Replacement
- CE 5292: Protocol of Submission-time Symbol Substitution
- CE 5294: Activation Cancelling from Symbol Prompting
- CE 5392: Cross References for Resources
- CE 5488: Symbol Setting as End-of-Job Action
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- CE 6090: Macro and Symbol Function Enhancements
- CE 6106: NOP API to Manage Resources
- CE 6318: Import of Running BS2000 / OSD Jobs
- CE 6744: API NOPUST1N: Additional Parameters
- CE 6745: User Profile for Administration Functions
- CE 7096: 2nd Symbol List Format
- CE 7099: Zoom Function for Subnetwork
- CE 7381: Password Indicator
- CE 7585: Default for 'Modification without Prompting'
- CE 7695: Mass Deletion of Active Conditions
- CE 7766: Copy Single Symbol to other Symbol Table
- CE 8107: Calendar Description
- CE 9559: Protocol Mailbox Messages in Log as well
- Request 205714: Selection Field in the Symbol List, Copying of Symbols
- Request 285959: JCL Check Influence on Active Conditions
- Request 336321: List Used CPU Time in Reports

## New Library Concept

User-defined modules should no longer be located in the product library SYSEOR. These should be moved to the library SYSEORU, which is a steplib for Entire Operations.

## Job Type DAT

With the new job type DAT, text files can be created using NOP JCL loading. Instead of being submitted, the generated JCL is written to a file. All features of the Macro language and symbol replacement can be used in the same way as for normal JCL.

## Symbols: Extension of the Include Function for Text Members

The #INCLUDE statement for text member inclusions in Macro JCL has been replaced by the #EOR-INCL statement.

(The old statement syntax will still work in Version 4.1.1, but will not be supported in later versions.)

- Text member inclusions with #EOR-INCL can now be performed from nearly all kinds of JCL locations. The included text members must be of type NAT (Natural).
- Text inclusions may have their own specific set of parameters.
- Nested text inclusion is supported.

## **Symbols: Symbol Setting as End-of-Job Action**

The setting of a symbol can now be defined directly as end-of-job action. It is no longer necessary to use an API for this purpose.

## **Symbols: Extension of Search Hierarchy**

Symbol tables on the owner level can be used for a symbol search. This is a new search level for symbols that could not be found in the local active symbol table.

## **Symbols: Global and Network Level Exits for 'Symbol not found'**

A global user exit can react to all situations, in which a necessary symbol has not been found. Such an exit can perform central notification (message sending) for missing symbols.

Exits for the case "symbol not found" can be defined on the network level, too. If defined, an exit on the network level is used instead of the global exit.

## **Resources**

The handling of resources has been extended with this NOP version. However, the resource behavior of previous versions remains the default.

- There is no longer any difference between logical and physical resources. Instead, the quantity of a resource can be set manually or it can be determined by a user exit. Such an exit can calculate the quantity of a resource by using any source, like ESY views or database content.
- Resources can be held longer than the lifetime of a job. They can be held until the whole network is terminated, until a manual release or until a release by an API.
- The cross-references for resources have been extended.

## **Reporting**

A new set of reporting programs is provided with this release. The reporting programs of NOP 3.2.1 are still available with this release, but without functional enhancements. The support of the of old reporting programs will end after this release.

## **Message Sending by E-mail**

Message sending by e-mail is now possible via ESY nodes on the platforms OS/390, UNIX and Windows (on Windows, a third-party command-line utility for e-mail sending is required).

For BS2000/OSD and VSE/ESA, this feature will be added in a future SM level or version, as soon as it is provided by the Entire System Server (ESY) on BS2000/OSD and VSE/ESA.

## **Logging: SAT Log File Replaces NOP Log File**

The new common SAT log file format replaces the NOP log file. There is no change to the NOP user interface. The user still sees only NOP log data, even if several products use the same log file.

## **One Common SAT Log File or Separate SAT Log Files**

The SAT log file can be installed to be used by several ESM products. A separate SAT log file can also be used for each installed ESM product.

For restrictions to using separate SAT log files, see the Installation Notes.

## **Additional New Features**

The following features have also been implemented:

- Logging of changes made in active JCL editing;
- The API, NOPUST1N, has been replaced by the API, NOPUST2N. This new API version provides more information about active networks and jobs.
- Resource allocation on network level.

## **Features no longer supported with this Version**

### **Problem 157662**

The special solution for Sagsis Problem 157662 (JCL generation by EDT procedures) has been removed.

### **CE 2279: Cross Reference for Symbol Table Usage**

The cross reference for symbol table usage is available in the "Cross References" menu. Use the direct command XREF to invoke this menu.

### **CE 2297: Time Frame Modification for Active Jobs on Network Level**

The time frame modification for active jobs on network level is available with this version.

### **CE 2424: Resource Reservation for Network**

Has been implemented with the new resource concept.

### **CE 2591: Resource Locking for Longer Periods**

Has been implemented with the new resource concept.

### **CE 2592: Extend Logical Resources by Physical Resources**

The new resource master definition allows all types of user-defined resource amount determinations.

### **CE 2642: Include JCL in Network and Job Reports**

The new report RJCLOC-P has been added for this purpose.

### **CE 2739: Input Condition Reference 'Last Workday'**

New input condition references are available with this version.

### **CE 2866: Resource for Network**

Has been implemented with the new resource concept.

## **CE 4831: Escape Characters for Symbol Replacement**

Available with this version.

## **CE 5292: Protocol of Submission-time Symbol Substitution**

Available with this version.

## **CE 5294: Activation Cancelling from Symbol Prompting**

A job or network activation can now be cancelled from the symbol prompting screen.

## **CE 5392: Cross References for Resources**

Several cross references for master resources, master prerequisite resource definition, and active resource usage, have been added with the new resource concept.

## **CE 5488: Symbol Setting as End-of-Job Action**

A new end-of-job action allows the direct definition of the symbol setting or of a symbol substring (like for BS2000/OSD job variables).

## **CE 5892: Reverse Mailbox List Display**

The mailbox list can be read in reverse order as well. The default for each user can be defined in the user profile.

## **CE 6090: Macro and Symbol Function Enhancements**

Text members can now be included in a much more flexible way.

## **CE 6106: NOP API to Manage Resources**

The API, NOPURE1N, has been implemented with the new resource concept.

## **CE 6318: Import of Running BS2000 / OSD Jobs**

The API, NOPUJI4N (successor of NOPUJI3N), now has an additional parameter for specifying a sysout file.

## **CE 6744: API NOPUST1N: Additional Parameters**

The API, NOPUST1N, has been replaced by NOPUST2N, which has more parameters.

## **CE 6745: User Profile for Administration Functions**

The user profile for administration functions has been extended with this version.

## **CE 7096: 2nd Symbol List Format**

Several symbol list formats are available now.  
(R 257246)

## **CE 7099: Zoom Function for Subnetwork**

The new line command Z in the job maintenance list can zoom into a sub-network.

## **CE 7381: Password Indicator**

For all password definitions, an additional text now shows whether or not a password has been defined.

## **CE 7585: Default for 'Modification without Prompting'**

Has been implemented with this version. When a Symbol Prompting User Routine is being defined, the field "Modification without Prompting" may no longer be left blank. The user must create a definition, which is suitable for this network.

## **CE 7695: Mass Deletion of Active Conditions**

In the Active Conditions screen, this function can be invoked by pressing PF6.

## **CE 7766: Copy Single Symbol to other Symbol Table**

The copying of single symbols to other symbol tables has been implemented with this version.

## **CE 8107: Calendar Description**

For each calendar, a short description can be entered. The short description is shown in the calendar list.

## **CE 9559: Protocol Mailbox Messages in Log as well**

Has been implemented with this version.

## **Request 205714: Selection Field in the Symbol List, Copying of Symbols**

Several enhancements have been implemented for the symbol list. Single symbols can now be copied to and from other tables.

## **Request 285959: JCL Check Influence on Active Conditions**

Temporary active conditions used in the JCL check of a whole network no longer interfere with "regular" active conditions.

## **Request 336321: List Used CPU Time in Reports**

Feature has been added with the new reports.