

Entire Operations

Release Notes

Version 5.4.1

April 2014

This document applies to Entire Operations Version 5.4.1.

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

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Document ID: NOP-RELNOTES-541-20140408

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Preface

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

1 Entire Operations Version 5.4.1 Release Notes

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This document supersedes and replaces the Release Notes for the product Entire Operations Version 5.3.1.

This chapter covers the following topics:

Introduction

These Release Notes list and explain the enhancements and new features provided with Entire Operations Version 5.4.1. They apply to all of the following supported operating systems, insofar as these operating systems are not dealt with in separate release notes:

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

General Prerequisites

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

- Adabas Version 8.x or above (mainframe), Adabas Version 6.x or above (UNIX);
- Natural Version 8.2 or above (mainframe); Natural Version 8.3 or above (UNIX and Windows);
- Entire System Server (Mainframe) Version 3.5 or above;
- Entire System Server (UNIX and Windows) Version 2.1.4.19 or above; note that you require Entire System Server 2.1.4 or above if you intend to run jobs with job type SAP.
- System Automation Tools (SAT) Version 3.4.2 or above;
- Natural Security (optional);
- Entire Network (optional); this product is required for any kind of multi-CPU constellation where mainframe and/or UNIX and/or Windows partners are involved (non-local);
- EntireX Broker Version 7.2.2 for z/VSE (optional);
- EntireX Broker Version 9.x for z/OS (optional);
- EntireX Broker Version 8.1.1 for BS2000/OSD (optional);
- This product is required for any kind of multi-machine constellation, if one partner is a UNIX system or Windows or different UNIX systems are involved. EntireX Broker is not required, if

you are running Entire Operations on a UNIX or Windows platform and controlling the job networks on a mainframe system.

- Entire Connection (optional)

This product is required for importing or exporting data from or to a PC file or a Natural work file on a PC.

The installation procedure for Entire System Server is described in the Entire System Server Installation and Customization Documentation.

The installation procedure for SAT is described in the System Automation Tools Documentation.

Special Considerations

DBID 148 is reserved for Entire System Server and must not be used for any data base.

Platforms and Required Middleware

The following products are required to connect the individual platforms:

Online System / Monitor	Job Execution	Connection / Products
mainframe	mainframe (local *)	none
mainframe	other mainframe	Entire Net-Work
mainframe	UNIX	EntireX Broker
mainframe	Windows	EntireX Broker
UNIX	UNIX (local *)	none
UNIX	other UNIX	EntireX Broker
UNIX	Windows	EntireX Broker
UNIX	mainframe	Entire Net-Work

* *Local* means that the Entire Operations online system is installed on the same machine on which jobs are executed.

Combinations are also possible. For example, if you want to install the Entire Operations online system on one mainframe and execute jobs on another mainframe and another UNIX or Windows machine, you would need:

- Entire Net-Work (one for each system to be connected) for connecting to the other mainframe and to UNIX or Windows, and
- EntireX Broker (on one system) for connecting to UNIX or Windows.

Migrating from Previous Versions

- [Migration of Data](#)

Migration of Data

- [NOP 5.3.1 to NOP 5.4.1](#)

NOP 5.3.1 to NOP 5.4.1

To migrate data from Entire Operations Version 5.3.1 directly to Version 5.4.1 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 5.4.1. Some data fields have larger field lengths and some descriptors have been released or added. This update is **not** upwardly compatible to Entire Operations versions below 5.4.1.

If you want to keep your log data: Adapt the SAT Log File for use with SAT 3.4.1. A field was added. This update is upwardly compatible to SAT versions below 3.3.1 and Entire Operations versions below 5.4.1.

or

- On UNIX: If the necessity for the migration is identified, it is performed automatically within the guided installation

The NOP log file (System File 2, SAT log file) remains in the same format.



Note: Direct Migration from versions earlier than 5.2.1 is possible via the Import/Export Utility only.

Compatibility and Migration

- [Previous Versions](#)
- [API Versions](#)

- [Data Migration](#)

Previous Versions

With the release of Entire Operations 5.4.1, versions 5.3.1 and below are no longer supported. We, therefore, strongly advise you to switch to the current version at your earliest convenience.

API Versions

The API versions remain the same as in Entire Operations 5.3.1.



Notes:

1. Fields which were marked “for future use” in a previous NOP version, might have become meaningful.
2. Parameters with names like ...-NETWORK-VERSION or ...-SYMTAB-VERSION became meaningful starting with Entire Operations 5.4.1. Please refer to the descriptions of *Versioning of Job Networks* and *Versioning of Symbol Tables* in the *Entire Operations Concepts and Facilities* documentation.
3. For several API's, new return codes were added. Please check the description of the *API Routines* in the *Entire Operations Users Guide* documentation.

Only the latest versions of APIs should be used for new development. These are documented in the section *API Routines*. Starting with the next Entire Operations version, older APIs will be supported for the two previous versions only. The existence of an older API module in the SYSEOR library does not imply that it would still be supported. Most API routines contain a version number as the seventh character of their name.

For example, in this Entire Operations version the Log API is NOPULW9N. The previous version NOPULW8N will still be supported.

Data Migration

The data migration from version 5.3.1 to version 5.4.1 is being performed as part of the migration process.

The data migration can be run any time manually, using a Natural batch JCL:

```
LOGON SYSEOR
DMDRIV - P
FIN
```

Internal control records prevent repeating of already completed migration steps.

Codepage Setting

It is recommended to run the Natural environments for the NOP Monitor, for the NOP character interface, and for the NOP RPC server with activated codepage support. Please refer to the Natural parameter `CFICU` and `CP`.

Reason is that NOP, user-defined exits and Macro JCL then can use the Natural system variable `*CODEPAGE` to determine exactly the code page in effect. So they will be able to perform correct code page translations, e.g. by the Natural `MOVE ENCODED` statement.

The NOP monitor tasks log the current codepage setting during startup. In the NOP character interface, the current codepage setting is shown by the `TECH` direct command.

When using the `CFICU` and `CP` parameters, they must be set to the same values for the NOP Monitor, for the NOP character interface, and for the NOP RPC server.

Solved Problems

All solved problems of version 5.3.1 up to the cumulative fix 13 are included in this release.

Entire Operations GUI Client

The Entire Operations GUI Client has been updated. For detailed descriptions on the updates, refer to the *Entire Operations GUI Client Release Notes* documentation.

Changes And Enhancements

This section covers the following topics:

- [Network Versioning and Symbol Table Versioning](#)
- [New System File – Accounting Data separated from Log File](#)

- Other Changes

Network Versioning and Symbol Table Versioning

Starting with Entire Operations 5.4.1, network versioning and symbol table versioning is fully supported. Please refer to the *Entire Operations Concepts and Facilities* documentation for detailed information.

New System File – Accounting Data separated from Log File

Starting with Entire Operations 5.4.1, the accounting data will be stored in a new separate system file. Prior to Entire Operations 5.4.1, the accounting data were stored in the log file.

The extraction of accounting data from an existing log file, and their storage into the accounting file is part of the **data migration** from Entire Operations 5.3.1 to Entire Operations 5.4.1.

Other Changes

In addition to the above changes, the following features were added, and issues were solved:

- Bulk execution of MACRO command
- NOP Log Performance improvement and Deletion of symbol table needs long time
- z/OS, JES2 1.13 ff. - extend Spool Class to 8 bytes
- NOP Log access rights – CUI
- Symbol Table Activation Mode as NOP Default
- Node Name and Broker ID - Length Extension
- z/OS - Support for increased SYSOUT data set numbers in SPOOL-FILES, READ-SPOOL and CONSOLE-LOG
- Detect empty files to be passed to NOM
- Comment field too short
- User setting: Prefix log messages by message code
- Switch for Step Level Accounting
- Increase Number of Symbol Tables in Network Activation
- Separate Accounting Data from Log File
- Input condition dependency from Symbol vs. predefined Symbols
- Log data display and printing: show 1/10 seconds
- Restrict number of versions for networks and symbol tables
- Global network version name check exit
- Network versioning: Mass update function to set the (initial) version
- Resource checking in large networks
- NSC checking by API NSCLI: support of private libraries
- Switch: Set 'job not ok' conditions, if any end-of-job action was not ok (e.g. to catch error ESY5530 during end-of-job action)
- Re-activation (V) of a job contained in a subnetwork: A symbol defined for the calling job is not found anymore

- Monitor task wait time API
- Keep Owner for 'NxtSt'
- Set event JNR 'Job not run - JCL error' for symbol replacement errors at submission time
- Task reconfiguration executed immediately after changes
- Windows PowerShell job type
- Compare network versions
- Compare symbol table versions
- Show subcode for EOR8680 messages with error numbers 3xxx
- Schedule modification - invocation from network maintenance
- Function that lists the objects referenced but not defined
- Show Unix HOSTNAME resp. Windows COMPUTERNAME in output protocol of jobs submitted by NOP by enhancing the script
- Reserved Symbols P-JCL-FILE, P-JCL-MEMBER
- z/OS: Retry spool reading in case of incomplete sysout

Bulk execution of MACRO command

Please refer to the description of the batch utility *MAC-GE-P* in the *Entire Operations Users Guide* documentation.

NOP Log Performance improvement and Deletion of symbol table needs long time

Some new descriptors have been added to positive impact the response time when reading or deleting NOP data.

z/OS, JES2 1.13 ff. - extend Spool Class to 8 bytes

For further information see *Monitor Defaults* in the *Entire Operations Administration* documentation.

NOP Log access rights – CUI

For security reasons, for users of type 'G' (general user) the flag 'Log Display' in the sub menu 'Monitoring' of the user profile will be extended by the values O = restrict to Owner and L = restrict to Owner and Owner list.

Symbol Table Activation Mode as NOP Default

The symbol table activation is definable as a system-wide default.

The new system wide default is used for new network definitions, and for networks, which have no explicit definition for the symbol table activation mode

Node Name and Broker ID - Length Extension

The node name length is to be extended from 16 to 32 bytes. The Broker ID is to be extended from 32 to 64 bytes.

This will allow to handle lengthy IPv6 Broker ID's.

z/OS - Support for increased SYSOUT data set numbers in SPOOL-FILES, READ-SPOOL and CONSOLE-LOG

The extension requires NPR 3.5.2 or above.

Detect empty files to be passed to NOM

New Global switch 'Pass empty files to NOM (Y/N)' introduced to support write a NOP log message to NOM or just doing a NOP log (warning) message.

Comment field too short

When defining jobs in NOP you can write a comment up to 50 characters.

User setting: Prefix log messages by message code

For better retrieval it is possible to display also the error message in a message line.

For compatibility reasons the functionality is selectable in the user profile.

Switch for Step Level Accounting

A new global switch (default setting) to enable / disable z/OS step level accounting is to be added.

The default is "N" (not enabled).

Increase Number of Symbol Tables in Network Activation

For more flexibility the number of symbol tables for network activation is increased to 100.

Separate Accounting Data from Log File

For performance issues the accounting data are stored in a separate LOG file named EOR-ACCOUNTING.

Input condition dependency from Symbol vs. predefined Symbols

For detailed information refer to *Input Condition: Symbol Value* in the *Entire Operations Users Guide* documentation.

Log data display and printing: show 1/10 seconds

The value has been changed for a better precision.

Restrict number of versions for networks and symbol tables

Global network version name check exit

For detailed information see *Global Exit for Version Names* in the *Entire Operation Administration* documentation.

Network versioning: Mass update function to set the (initial) version

Resource checking in large networks

For performance reasons a new switch “passive wake up limit” introduced to limit the number of active jobs to be awaked.

NSC checking by API NSCLI: support of private libraries

Switch: Set 'job not ok' conditions, if any end-of-job action was not ok (e.g. to catch error ESY5530 during end-of-job action)

New Switch: Set “job not ok” conditions, if any end-of-job action was not ok (e.g. to catch error ESY5530 during end-of-job action).

If any end-of-job action fails, the job status will be set to 'not ok', and the conditions defined for 'job not ok' will be set, instead of the conditions defined for 'job ok'.

Re-activation (V) of a job contained in a subnetwork: A symbol defined for the calling job is not found anymore

Monitor task wait time API

For detailed information refer to *Display Monitor Task Status* in the *Entire Operations Administration* documentation.

Keep Owner for 'NxtSt'

Set event JNR 'Job not run - JCL error' for symbol replacement errors at submission time

If a symbol replacement error occurs at submission time, the event JNR 'Job not run - JCL error' is set to 'occurred'.

For detailed information refer to *Symbol Replacement at Submission Time* in the *Entire Operations Users Guide* documentation.

Task reconfiguration executed immediately after changes

For detailed information refer to *Monitor Defaults* in the *Entire Operations Administration* documentation.

Windows PowerShell job type

Compare network versions

For detailed information refer to *Compare Networks Report* in the *Entire Operations Users Guide* documentation.

Compare symbol table versions

For detailed information refer to *Compare Symbol Tables Report* in the *Entire Operations Users Guide* documentation.

Show subcode for EOR8680 messages with error numbers 3xxx

Schedule modification - invocation from network maintenance

Schedule modification - invocation from network maintenance can now be activated directly.

For detailed information refer to *Schedule Modification and Planned Starts* in the *Entire Operations Users Guide* documentation.

Function that lists the objects referenced but not defined

There is a new function in the cross reference menu that lists those objects that are referenced by other objects but that are not defined.

For detailed information refer to *List Undefined Objects* in the *Entire Operations Users Guide* documentation.

Show Unix HOSTNAME resp. Windows COMPUTERNAME in output protocol of jobs submitted by NOP by enhancing the script

Reserved Symbols P-JCL-FILE, P-JCL-MEMBER

For detailed information refer to *Predefined and Reserved Symbols* in the *Entire Operations Users Guide* documentation.

z/OS: Retry spool reading in case of incomplete sysout

Replaced User Exit Parameter Lists

The parameter list NOPSYP2A has been replaced by NOPSYP3A.