

## **Entire Operations**

**Entire Operations Version 5.5.2 CF 02 Release Notes** 

Version 5.5.2

October 2021

This document applies to Entire Operations Version 5.5.2 and 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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# 1 About this Documentation

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### **Document Conventions**

Convention	Description	
Bold	Identifies elements on a screen.	
Monospace font	t Identifies service names and locations in the format folder.subfolder.service, APIs, Java classes, methods, properties.	
Italic	Identifies:	
	Variables for which you must supply values specific to your own situation or environment.	
	New terms the first time they occur in the text.	
	References to other documentation sources.	
Monospace font	Identifies:	
	Text you must type in.	
	Messages displayed by the system.	
	Program code.	
{}	Indicates a set of choices from which you must choose one. Type only the information inside the curly braces. Do not type the { } symbols.	
I	Separates two mutually exclusive choices in a syntax line. Type one of these choices. Do not type the   symbol.	
[]	Indicates one or more options. Type only the information inside the square brackets. Do not type the [] symbols.	
	Indicates that you can type multiple options of the same type. Type only the information. Do not type the ellipsis ().	

## **Online Information and Support**

#### **Software AG Documentation Website**

You can find documentation on the Software AG Documentation website at <a href="https://documentation.softwareag.com">https://documentation.softwareag.com</a>.

#### Software AG Empower Product Support Website

If you do not yet have an account for Empower, send an email to empower@softwareag.com with your name, company, and company email address and request an account.

Once you have an account, you can open Support Incidents online via the eService section of Empower at <a href="https://empower.softwareag.com/">https://empower.softwareag.com/</a>.

You can find product information on the Software AG Empower Product Support website at https://empower.softwareag.com.

To submit feature/enhancement requests, get information about product availability, and download products, go to **Products**.

To get information about fixes and to read early warnings, technical papers, and knowledge base articles, go to the **Knowledge Center**.

If you have any questions, you can find a local or toll-free number for your country in our Global Support Contact Directory at <a href="https://empower.softwareag.com/public\_directory.aspx">https://empower.softwareag.com/public\_directory.aspx</a> and give us a call.

#### **Software AG Tech Community**

You can find documentation and other technical information on the Software AG Tech Community website at <a href="https://techcommunity.softwareag.com">https://techcommunity.softwareag.com</a>. You can:

- Access product documentation, if you have Tech Community credentials. If you do not, you will need to register and specify "Documentation" as an area of interest.
- Access articles, code samples, demos, and tutorials.
- Use the online discussion forums, moderated by Software AG professionals, to ask questions, discuss best practices, and learn how other customers are using Software AG technology.
- Link to external websites that discuss open standards and web technology.

#### **Data Protection**

Software AG products provide functionality with respect to processing of personal data according to the EU General Data Protection Regulation (GDPR). Where applicable, appropriate steps are documented in the respective administration documentation.

# 2 Entire Operations Version 5.5.2 CF 02 Release Notes

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These release notes inform you of the enhancements and new features provided with Version 5.5.2 CF 02 of Entire Operations.

Unless otherwise indicated, the information in these release notes applies to Version 5.5.2 CF 02:

- for both Entire Operations (NOP) and Entire Operations GUI Client (OGC),
- on all supported platforms.

This document supersedes and replaces the release notes for Entire Operations from Version 5.5.1 to Version 5.5.2 CF 01.

#### **Update Information, October 2021**

- New or changed features provided with Cumulative Fix 02 of Entire Operations Version 5.5.2 have been added with the remark "(with Version 5.5.2 CF 02)".
- New or changed features provided with Cumulative Fix 01 of Entire Operations Version 5.5.2 have been added with the remark "(with Version 5.5.2 CF 01)".
- New or changed features provided with Entire Operations Version 5.5.2 have been added with the remark "(with Version 5.5.2)".
- New and changed features provided with Cumulative Fix 04 of Entire Operations Version 5.5.1 have been added with the remark "(with Version 5.5.1 CF 04)".
- New and changed features provided with Cumulative Fix 03 of Entire Operations Version 5.5.1 have been added with the remark "(with Version 5.5.1 CF 03)".
- Cumulative Fix 02 of Entire Operations Version 5.5.1 mainly provides corrections and enhancements of internal functions and text on screens or windows of the CUI or GUI interface. New and changed features are denoted with the remark "(with Version 5.5.1 CF 02)".
- New and changed features provided with Cumulative Fix 01 of Entire Operations Version 5.5.1 have been added with the remark "(with Version 5.5.1 CF 01)".

## **General System Updates**

In addition to new or changed functions, each release of Entire Operations is associated with maintenance corrections and enhancements of internal functions and text fields on screens or windows of the CUI or GUI interface.

## **Entire Operations Documentation Updates**

Entire Operations documentation in HTML and PDF format is provided in the **Documentation** section of Software AG's Empower web site at *http://empower.softwareag.com/* (Empower login required). The documentation is usually updated whenever a new Entire Operations version or cumulative fix (CF) is released.



**Note:** Due to last-minute documentation updates, it may be possible that the online help that you can invoke directly from the product does not yet contain the latest information. The most up-to-date Entire Operations documentation can always be found in the **Documentation** section of Software AG's Empower web site.

## **Supported Operating Systems**

Entire Operations Version 5.5.2 supports the following operating systems:

- z/OS,
- z/VSE,
- BS2000,
- UNIX/Linux (HP-UX, AIX, Solaris, Redhat, SuSE Linux) and
- Windows (Intel) (managed nodes only).

For detailed information on the supported operating system versions, see the current Natural *Release Notes* for mainframes, UNIX or Windows.

## **Supported Browsers**

As of Version 5.5.2, Entire Operations GUI Client supports the following browsers:

- Mozilla Firefox Version 60.4.0esr (64-bit) or above
  - Only the Extended Support Releases (ESR) of Mozilla Firefox are explicitly supported.
- Microsoft Internet Explorer Version 11 or above.

## **Prerequisites for the Mainframe**

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

- Adabas Version 8 or above;
- Natural Version 8.2 or above; the Natural installation must include the Software AG Editor component;
- Entire System Server Version 3.6 or above;
- Entire System Server Version 2.1.14 (UNIX/Linux and Windows) or above.
- System Automation Tools Version 3.5.2 or above;
- Natural Security (optional);
- Entire Net-Work (optional); this product is required for any kind of multi-CPU constellation where mainframe and/or UNIX/Linux and/or Windows partners are involved (non-local);
- EntireX Broker Version 7.2.2 for z/VSE (optional);
- EntireX Broker Version 10.3 for z/OS (optional);
- EntireX Broker Version 8.1.1 for BS2000 (optional);
- EntireX Broker is required for any kind of multi-machine constellation if one partner is a UNIX/Linux system or Windows or different UNIX/Linux systems are involved. EntireX Broker is not required if you are running Entire Operations on a UNIX/Linux 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* documentation.

The installation procedure for System Automation Tools is described in the *System Automation Tools* documentation.

## **Prerequisites for UNIX/Linux**

Before you can install Entire Operations on a UNIX/Linux system, the following Software AG products must have been installed at your site:

- Natural Version 9.1 (or above) for UNIX/Linux;
- Adabas Version 6.6 (or above) for UNIX/Linux.

With Entire Operations Version 5.5.2, the following products will be installed automatically:

- Entire System Server Version 2.1.14 (or above) for UNIX/Linux;
- System Automation Tools Version 3.5.2 or above;
- EntireX Libraries 10.3 Fix 5 (or above). Fix 5 needs to be installed using Software AG Update Manager. The libraries are delivered as a separate component under Infrastructure > Libraries > EntireX Libraries in the Software AG Installer (see the webMethods documentation Installing webMethods and Intelligent Business Operations Products).

## **Prerequisites for Windows GUI Client**

Entire Operations GUI Client will run on any Windows platform on which Natural Version 9.1 (or above) for Windows runs.



**Note:** Make sure the machine on which you are going to run the Software AG Installer contains the latest Windows updates. On Windows Version 8.1 and Windows Server 2012R2, the installation will fail if the Microsoft update KB2919355 is missing.

Entire Operations GUI Client Version 5.5.2 requires the following products:

- Natural Version 9.1 (or above) for Windows. You can use either Natural Development version or Natural Runtime.
  - Entire Operations GUI Client runs on any Windows platform on which Natural Version 8.3.6 (or above) for Windows runs.
- Entire Operations Server Version 5.5.2;
- EntireX Libraries 10.3 Fix 5 or above (optional). Fix 5 needs to be installed using Software AG Update Manager. The libraries are delivered as a separate component under **Infrastructure** > **Libraries** > **EntireX Libraries** in the Software AG Installer (see the webMethods documentation *Installing webMethods and Intelligent Business Operations Products*).

## **Special Considerations**

Database ID (DBID) 148 is reserved for Entire System Server and must not be used for any database.

## **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/Linux	EntireX Broker
mainframe	Windows	EntireX Broker
UNIX/Linux	UNIX/Linux (local*)	none
UNIX/Linux	other UNIX/Linux	EntireX Broker
UNIX/Linux	Windows	EntireX Broker
UNIX/Linux	mainframe	Entire Net-Work

<sup>\* &</sup>quot;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/Linux 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/Linux or Windows, and
- EntireX Broker (on one system) for connecting to UNIX/Linux or Windows.

## **Compatibility and Migration**

- Support for Previous Versions
- Compatibility Check for System Automation Tools Versions
- Data Migration
- Database File Migration

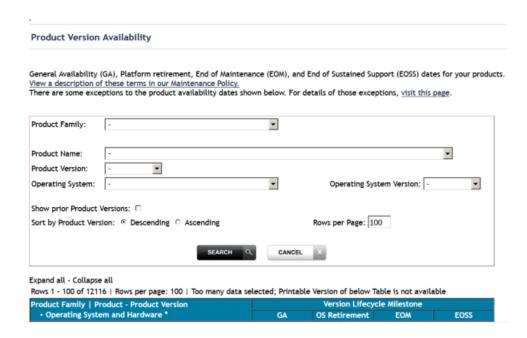
Application Programming Interface (API) Versions

#### **Support for Previous Versions**

Entire Operations Version 5.5.x is the official replacement for Entire Operations Version 5.4.3, or earlier versions.

You can view all available Software AG product versions and check the dates when their maintenance ends by visiting the Software AG Empower website at <a href="https://empower.softwareag.com/">https://empower.softwareag.com/</a>:

- 1. Log in to Empower.
- 2. Expand **Products & Documentation** in the left menu of the page and select **Product Version Availability**:



3. Select the required filter criteria from the drop-down list boxes and click on the **SEARCH** button.

A list of supported Software AG products that meet the filter criteria is shown. In addition, the end-of-standard-maintenance dates are indicated in the **EOM** column.

If you mark **Show prior Product Versions**, only product versions that are out of maintenance are listed.

#### **Compatibility Check for System Automation Tools Versions**

(with Version 5.5.1 CF 02)

Entire Operations requires the following versions of System Automation Tools (SAT):

- Entire Operations versions earlier than Version 5.5.x. require System Automation Tools versions earlier than Version 3.5.1.
- Entire Operations Version 5.5.x requires System Automation Tools Version 3.5.1 (and above).

Compatibility check constraints are used to enforce valid version combinations:

- At the start of an Entire Operations session on a CUI client (NOP),
- At the start of an Entire Operations session on a GUI client (OGC),
- At the start of the Entire Operations Monitor.

Incompatible versions cause start failures and an error message similar to the following occurs and is written to the SYSOUT file of the Entire Operations Monitor:

```
EOR2598 - SAT Version \geq 3.4.1 required for NOP 5.4.3
```

#### **Data Migration**

The data migration from Entire Operations Version 5.4.3 to Version 5.5.x is performed as part of the migration process.

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

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

Internal control records prevent repeating of already completed migration steps.

#### **Database File Migration**

This following migration steps are only required if you migrate data from an Entire Operations Version earlier than Entire Operations Version 5.5.x:

#### ➤ To migrate data from Entire Operations Version 5.4.3 to Version 5.5.x

- 1 Make a backup of the Entire Operations Version 5.4.3 system files.
- 2 Unload the old database files and load the new database files by using the import/export functions.

Or:

- Adapt the old Entire Operations System File 1 for use with Entire Operations Version 5.5.x. Some data fields have larger field lengths and some descriptors have been released or added.
- 3 If you want to keep your log data: Adapt the System Automation Tools log file for use with System Automation Tools Version 3.5.1.

Or:

On UNIX: If migration is required, it is performed automatically within the guided installation.

#### **Application Programming Interface (API) Versions**

The API versions remain the same as in Entire Operations Version 5.4.3.



#### Notes:

- 1. Parameters reserved for future use in a previous Entire Operations version may be used in Entire Operations Version 5.5.x.
- 2. Parameters with names like -NETWORK-VERSION or -SYMTAB-VERSION have been used since Entire Operations Version 5.4.3. Please refer to the descriptions of *Versioning of Job Networks* and *Versioning of Symbol Tables* in the *User's Guide* documentation.
- 3. For several APIs, new return codes were added. Please check the description of the *API Routines* in the *User's Guide*.

Only the latest versions of APIs should be used for new development. These are documented in the section *API Routines* in the *User's Guide*. Starting with the next Entire Operations version, older APIs will be supported for the two previous versions only. The existence of an older API routine in the Natural SYSEOR system library does not imply that it is still 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 is still supported for a limited time.

## **Code Page Setting**

Software AG recommends that you run the Natural environments for the Entire Operations Monitor, the Entire Operations character interface and the Entire Operations RPC server with enabled code page support. For the required Natural parameter settings, see the Natural parameters CFICU and CP described in the Natural *Parameter Reference* documentation.

If code page support is enabled, user exits and macro JCL defined in Entire Operations can use the Natural system variable \*CODEPAGE (see the Natural *System Variables* documentation) which determines the current code page for correct code page conversion, for example, with the Natural MOVE ENCODED statement.

The Entire Operations Monitor tasks log the current code page setting during startup. In the Entire Operations character interface, the current code page setting is shown by the TECH direct command (see the *Direct Commands* documentation).

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

### **Solved Issues**

All solved issues of Entire Operations Versions 5.4.3, 5.5.1 (with cumulative fixes CF 01 through CF 05) and 5.5.2 (with cumulative fixes CF 01 through CF 02) are included in this release.

- Corrections to Importing API (NOPUJI4N)
- Symbol Tables and Calendars Exported Contrary to Request Object Type OWNER
- Extended Logging: 'Log System Messages' for Unix and Windows Jobs
- Attachments for E-mails on BS2000 Nodes SYSOUT and Other Files
- Submenu ENTIRE Output Management on Main Menu
- NPR3451 Path not Fully Qualified with Activation Escape Character §
- Duplicate Entries in the Active Usage Symbol Table List (OGC)
- Abend with NAT1316 when Choosing Object Filter/Show Resources in Network Diagram (OGC)
- Errors EOR1850 and EOR8802 when Importing Jobs
- Loop when Editing a File
- Symbol Table Missing when Network Export is Executed via Batch Job
- EOJ Action Set Symbols Y not Imported Correctly
- Loading JCL Fails due to Invalid UserID
- Network Export from Owner SYSTEM Impossible
- Active Job SYSOUT Browsing (CUI): File Name in Header Incorrect when Repeated
- Day Deadline is not Observed
- Monitor Error NAT3009 in SYSEOR/IRREL--N
- CUI: Change Monitor Node: NAT3144 in DF-MO--P
- CUI: Font Color Changed from Blue to Turquoise for Enhanced Readability
- Unexpected Logon failed Global Message during Job Execution Tracking
- View EOR-JOB-MASTER: JCL Node (and Eventually Execution Node) is not Stored Consistently
- Import/Export E-mail Messages: Correction of Header and Content (OGC)
- Temporary Elements in Library SYSEORU not Deleted
- Additional Network Execution Displayed at the Turn of the Year
- Performance: Check Necessity of Node Logon before Linux Job Execution Check
- Export Summary Missing (OGC)
- Pregenerated JCL Overwritten if a Network has Several Versions
- Job Master: Member Required for Librarian JCL Definition
- Abend Error NAT1255 when Editing/Browsing JCL in Diagram Mode (OGC)
- Entire Operations does not Replace Variable for E-mail for Job-Network
- Utility to List Jobs with Empty or Invalid JCL Userld or Submit Userld or Modification Userld

- Suspension Functionality: Post-corrections
- z/VSE Corrections
- EXPORT ALL Parameter for IE-EXA-P Needs to Be Corrected
- Resubmit Job Active: Yes to All Button Requested (OGC)
- Monitor Error NAT0966 in SYSEOR/EJC----P Line 6774
- EOR2030 Monitor Error NAT1305 in RSM-US-N Line 8200
- CUI: Unnecessary Logon Requests with Submit Security User Type = Owner
- Definition of a Job Suffix Symbol for Dynamic Use
- NOPUT1-P: API NOPUSY7N Invocation: Multiple Symbol Reading with N (Next) Fails if a Multiple Value is 120 Bytes Long
- Browsing BS2000 SYSOUT from NOP on UNIX Fails with SO-XB--P 1500 Invalid G-NI 0
- Pgm SYSEOR/CL-JA--N Line 2990 Error NAT1257/0000

#### **Corrections to Importing API (NOPUJI4N)**

(with Version 5.5.1 CF 04)

The following corrections to job import API NOPUJI4N for a UNIX job import were made:

- If a currently running jobID (PID) is imported without a SYSOUT file name, an automatic SY-SOUT file name allocation is attempted.
- Status setting corrections for the job are activated for the import, depending on the passing of jobId and/or SYSOUT file in the API call.
- Several error and status handling corrections.

#### Symbol Tables and Calendars Exported Contrary to Request - Object Type OWNER

(with Version 5.5.1 CF 04)

Export of object type OWNER:

Corrected the handling of the selection parameters.

```
with Schedules ==> N (Y,N)
with Calendars ==> N (Y,N)
with Symbols ==> N (Y,N)
```

Export of object type OWNER to location NAT was corrected.

For further information, see *Exporting Single Objects* in the *User's Guide*.

#### Extended Logging: 'Log System Messages' for Unix and Windows Jobs

(with Version 5.5.1 CF 04)

Jobs to be executed on UNIX or Windows:

The functionality Extended logging - messages, which is available for mainframe jobs, is now also available on UNIX and Windows.

#### Attachments for E-mails on BS2000 Nodes - SYSOUT and Other Files

(with Version 5.5.1 CF 04)

If a job is executed on BS2000, UNIX, or Windows, the job's SYSOUT can be attached to an e-mail.

This functionality is not available for z/OS.



**Note**: You must use submission escape character for P-SYSOUT. Depending on the repetition count of the job, varying SYSOUT file names will be generated by Entire Operations as part of the submission process.

#### Submenu ENTIRE Output Management on Main Menu

(with Version 5.5.1 CF 05/5.5.2)

- In the Main Menu of the Character User Interface (CUI) of Entire Operations:

  When an LFILE entry for Entire Output Management does not exist, the entry "Entire Output Management" (NOM) in the DC Solutions submenu is omitted. The same applies when on Default Setting (4) screen of the Entire Operations Defaults the field Show installed ESM Products in CUI Main Menu is set to N (no).
- In the Entire Operations Defaults (CUI):
  On the Default Setting (4) screen, the field Show installed ESM Products in CUI Main Menu has been added. The default setting is Y (yes), which corresponds to the former behavior.

The **SYSOUT Line Limit** option is now contained on the **Default Setting (4)** screen. It used to be on the **Default Setting (2)** screen.

#### NPR3451 Path not Fully Qualified with Activation Escape Character §

(with Version 5.5.1 CF 05/5.5.2)

On Windows, backlashes (\) are set in the following predefined symbols:

P\_NADIR P\_JCL\_FILE P SYSOUT

On UNIX "realpath" is used for:

P\_NADIR P\_JCL\_FILE P SYSOUT

#### **Duplicate Entries in the Active Usage Symbol Table List (OGC)**

(with Version 5.5.1 CF 05 and 5.5.2)

The problem of a duplicate entries for Network Active in the **Active Usage Symbol Table Active** list has been fixed.

For further information, see in the *User's Guide*.

#### Abend with NAT1316 when Choosing Object Filter/Show Resources in Network Diagram (OGC)

(with Version 5.5.2 CF 01)

The problem with activation of **Show Resources** in **Object Filter** in case the diagram also references resources was fixed.

For further information, see **Object Filter** in the section *Maintenance Functions for Diagrams* in the *User's Guide*.

#### Errors EOR1850 and EOR8802 when Importing Jobs

(with Version 5.5.2 CF 01)

In Version 5.5.1/4: Depending on symbol content, imported jobs (migrated from Version 5.4.3) were rejected with error message EOR1850 and EOR8802.

The problem was fixed by:

1. Data migration routine DM551006:

Migration of the symbol name for "input condition depending on symbol" corrected.

#### 2. Special repair program ICSY-R1P.

#### Loop when Editing a File

(with Version 5.5.2 CF 01)

Editing a BS2 or LMS file from Entire Operations on UNIX (CUI) causes an Entire Operations online session loop if one record contains the characters /\*.

In Entire Operations (CUI) and in the Monitor (for example, cataloging in background), the correct functioning of the editor is forced.

#### Symbol Table Missing when Network Export is Executed via Batch Job

(with Version 5.5.2 CF 01)

The selection logic for the export of dependent symbol tables has been corrected.

#### **EOJ Action Set Symbols Y not Imported Correctly**

(with Version 5.5.2 CF 01)

The NOP import logic has been corrected.

#### Loading JCL Fails due to Invalid UserID

(with Version 5.5.2 CF 01)

The original "last modification user" will not be modified anymore by a data migration routine.

This correction must be active before a data migration from Entire Operations Version 5.4.x to Entire Operations Version 5.5.x will be performed.

#### **Network Export from Owner SYSTEM Impossible**

(with Version 5.5.2 CF 01)

Export and import of job networks belonging to owner SYSTEM will be allowed.

#### Active Job SYSOUT Browsing (CUI): File Name in Header Incorrect when Repeated

(with Version 5.5.2 CF 01)

The file name generation for the header in CUI SYSOUT browsing for UNIX and Windows jobs has been corrected.

#### Day Deadline is not Observed

(with Version 5.5.2 CF 01)

The checking of a defined day deadline of a job network's schedule has been corrected.

For further information, see field **Day Deadline** in *Fields: Network Schedule Definition* in the *User's Guide*.

#### Monitor Error NAT3009 in SYSEOR/IRREL--N

(with Version 5.5.2 CF 01)

The END TRANSACTION handling in module IRREL--N has been corrected.

#### CUI: Change Monitor Node: NAT3144 in DF-MO--P

(with Version 5.5.2 CF 01)

The update logic in module DF-MO--P has been corrected.

#### CUI: Font Color Changed from Blue to Turquoise for Enhanced Readability

(with Version 5.5.2 CF 01)

As text in blue is hard to read on dark gray background, the font color was changed from blue to turquoise (TU).

#### Unexpected Logon failed Global Message during Job Execution Tracking

(with Version 5.5.2 CF 01)

Job execution tracking, module JX----P:

Corrected the switching between different submit user IDs if multiple active jobs on different nodes (also different operating systems) and/or different submit user IDs are to be tracked.

#### View EOR-JOB-MASTER: JCL Node (and Eventually Execution Node) is not Stored Consistently

(with Version 5.5.2 CF 01)

The left-bound orientation of the fields J-JCL-NODE-A5 and J-EXEC-NODE-N5 is enforced. The data migration program DM551015 corrects these fields, if necessary.

#### Import/Export E-mail Messages: Correction of Header and Content (OGC)

(with Version 5.5.2 CF 02)

Some corrections have been made to the sending of e-mails relating to OGC reports.

#### Temporary Elements in Library SYSEORU not Deleted

(with Version 5.5.2 CF 02)

Temporary members used in macro TEST have names Shhiiss# and Thhiiss#, e.g. S142215# or T152316#. These are deleted as designed when using macro TEST in the Entire Operations character user interface. Successful deletions and deletion errors will be logged. OPMNED-N now invokes the central routine DY-TMD-N for the deletion of temporary members.

#### Additional Network Execution Displayed at the Turn of the Year

(with Version 5.5.2 CF 02)

Correction of the triggered generation of the network schedule after a modification of the schedule definition of the linked schedule.

**Hint:** The views

Network Schedule Definition, PF7 (Sch.L) => Schedule List

and

#### **Network Schedule**

can be different because individual **Explicit Dates** can be defined when using PF4 (ExplD) on the **Network Schedule Definition** screen.

#### Performance: Check Necessity of Node Logon before Linux Job Execution Check

(with Version 5.5.2 CF 02)

Unnecessary logons to UNIX and Windows nodes during the execution tracking of UNIX and Windows jobs are avoided now.

#### **Export Summary Missing (OGC)**

(with Version 5.5.2 CF 02)

The writing of the export summary has been corrected.

#### Pregenerated JCL Overwritten if a Network has Several Versions

(with Version 5.5.2 CF 02)

The pregenerated JCL for a job will be stored separately for each network version. If different pregenerated JCL is to be used for several network versions, it will be generated newly for each affected version.

#### Job Master: Member Required for Librarian JCL Definition

(with Version 5.5.2 CF 02)

Character user interface: The error handling and error logging for JCL location LIB (CA Librarian) has been corrected.

#### Abend Error NAT1255 when Editing/Browsing JCL in Diagram Mode (OGC)

(with Version 5.5.2 CF 02)

The problem that occurred in OGC at logon to a node in conjunction with the option **Edit Master JCL/Browse Master JCL** in the network diagram has been fixed.

#### Entire Operations does not Replace Variable for E-mail for Job-Network

(with Version 5.5.2 CF 02)

The the log message to be written in case the symbol containing the e-mail address was not found has been corrected.

#### Utility to List Jobs with Empty or Invalid JCL Userld or Submit Userld or Modification Userld

(with Version 5.5.2 CF 02)

The special utility N003624A produces a list of jobs in which the JCL UserId or submit UserId or modification UserId is missing or potentially wrong. It can be run in a Natural batch job:

LOGON SYSEOR NOO3624A FIN

#### **Suspension Functionality: Post-corrections**

(with Version 5.5.2 CF 02)

The passing to job-active ISN, to-send ISN, etc., to FS-CHK-N has been corrected at several locations.

This avoids a functional loop around the suspension of message sending.

Suspensions are logged within FS-CHK-N now.

The parameter list of FS-CHK-N has been modified.

#### z/VSE Corrections

(with Version 5.5.2 CF 02)

Several corrections have been made for z/VSE jobs:

- VOLSER: keep optional for z/VSE
- AJLF---N adaptation
- MEMSEL-N: LIB-DIRECTORY adaptation
- Extended Logging: SYSOUT task name
- ?1S02D INVALID STATEMENT
- etc.

Known issues:

- VSE job cancel is not working.
- CUI: JCL editing is not working.

#### **EXPORT ALL Parameter for IE-EXA-P Needs to Be Corrected**

(with Version 5.5.2 CF 02)

The parameter handling of IE-EXA-P has been corrected.

P-OWNER is optional now, as documented.

#### Resubmit Job Active: Yes to All Button Requested (OGC)

(with Version 5.5.2 CF 02)

For the **Resubmit** function, a new confirmation dialog has been created. It provides the following features:

- A Yes to All button and
- several options for active job resubmission.

For further information, see *Resubmitting Active Jobs* in the *User's Guide* documentation.

#### Monitor Error NAT0966 in SYSEOR/EJC----P Line 6774

(with Version 5.5.2 CF 02)

A correction for this issue has been made.

#### EOR2030 - Monitor Error NAT1305 in RSM-US-N Line 8200

(with Version 5.5.2 CF 02)

RSM-US-N:

- Try to avoid NAT1305.
- Log an emergency message if the run number of a resource usage is not in the allowed range.

#### CUI: Unnecessary Logon Requests with Submit Security User Type = Owner

(with Version 5.5.2 CF 02)

On the **Monitor Defaults** screen and in the **Node Modification** window, the term **Submit Security User Type** has been changed to **Node Security User Type**. The node security user type applies to JCL nodes and execution nodes (= submit nodes).

Moreover, several corrections have been made for the node security user type 0 (owner).

#### Definition of a Job Suffix Symbol for Dynamic Use

(with Version 5.5.2 CF 02)

Corrected and/or disabled the suffix symbol existence test in the job definition and in the input condition definition. This will facilitate the dynamic setting and usage of multiple symbols.

## NOPUT1-P: API NOPUSY7N Invocation: Multiple Symbol Reading with N (Next) Fails if a Multiple Value is 120 Bytes Long

(with Version 5.5.2 CF 02)

Natural NOPUT1 - P program: Corrected the size of the Symbol Value field to A120 for the invocation of API NOPUSY7N.

#### Browsing BS2000 SYSOUT from NOP on UNIX Fails with SO-XB--P 1500 - Invalid G-NI 0

(with Version 5.5.2 CF 02)

Entire Operations on UNIX:

- Start a new character user interface session.
- Make sure with STATUS NODES that the execution node of an already executed BS2000 job is not contained in the Node Status list.
- In the list of active jobs, enter the line command S (SYSOUT).
- When the correction is active, the SYSOUT of the BS2000 job should be visible.

#### Pgm SYSEOR/CL-JA--N Line 2990 Error NAT1257/0000

(with Version 5.5.2 CF 02)

The actual size of some X-arrays will be checked at more locations.

## **New and Changed Features**

New and changed features in Entire Operations Version 5.5.2 (including Version 5.5.1 with cumulative fixes CF01 through CF05, and Version 5.5.2 CF01) are summarized in the following section:

- Installation/Setup: Changes to LFILE Assignments
- Extended Log for Accounting Data
- Support for Password Phrases for Logons to z/OS Nodes
- Support for Long Passwords for Logons to BS2000 Nodes
- New Monitor Defaults Option to Suspend Entire Operations Functions

- New Default Settings for User Node Access
- Resource Allocation Option to Exclude Temporary Dummy Jobs
- No Job Restrictions for Resource Allocation
- New User Access Rights for Active Prerequisite Resources
- Renamed User Access Option for JCL Editing
- Schedule Dependencies with Exact Month and Day of the Year
- New Scheduling Option: Calendar Day or Workday Later for Start and Deadline Times
- Job Scheduling: History Elapsed Times for Multiple Active Jobs
- Retention Period for Single Networks
- Retention of Active Conditions
- Changed Retention Periods for OGC Import/Export Requests and Reports
- Network Master: Copying Defaults to Jobs with User ID
- Support for Long Symbol Values
- Increased Maximum Value for Multiple-Value Symbols
- Import/Export: Increased Maximum Size for Multiple-Value Fields for Symbol Masters
- Reserved Symbols Provided as UNIX and Windows Environment Variables
- Reserved Symbol for Epilog Scripts on UNIX and Windows
- New Predefined Symbols for Escape Character Replacements
- Nested Symbols in CMDLINE-job
- Usable Symbol Tables: Version of Active Network Listed
- Job Input Condition: Symbol Check in Active Symbol Tables or Symbol Table Masters
- End-of-Job Action: Mandatory Fields for Correct Message Sending
- End-of-Job Action: Message Sending Node Improved
- Total Run Number Removed to Improve Performance
- API Parameter Definitions Enhanced for more Flexibility
- API NOPUNX1N: Large Buffers Allowed for UNIX and Windows Files
- API NOPUSY6N Replaced by NOPUSY7N
- New API NOPUSY7N: Access Entire Operations Symbols
- New Accounting Facility for Collecting Monitor Function Data
- Accounting Data Functions Renamed
- SYSOUT Line Limit Settings
- Changes to Return Codes for Input Condition User Exits (ICO)
- Active Jobs: Reasons for Temporary Dummy Execution
- Improved Message for Successful Subnetwork Runs
- Receiver Renamed to Recipient
- Cross-References: Report and Menu Sequence Changed
- Cross-References: Refined Search for JCL Usage Reports
- Copying Objects from a Secondary System File no Longer Supported
- Utility for User ID Mass Update Enhanced
- Utility for Owner Deletion Replaced
- End-of-Job Action: Text and File Attachments for Messages
- End-of-Job Action: Symbol Setting Window Rearranged (NOP only)
- Mass Update for Files Passed to Entire Output Management (NOP only)
- Node Selection Options for Network Lists (NOP only)
- Enhanced Copy Function for Entire Operations Objects (NOP only)

- Active Job Conditions: Filtering Result Lists by Run Numbers (NOP only)
- New Browse Command to View Sources and Settings (NOP only)
- Mass Update for User Node Access (NOP only)
- Changes to the System Services Menu (NOP only)
- List of Active Jobs now Available for Next Network Starts (NOP only)
- Filter for List of Current Network Versions (OGC only)
- Symbol Table: Improved Information for Where Used Function (OGC only)
- Mass Update for Execute if Temporary Dummy (OGC only)
- Global Object Filter for Users (OGC only)
- Alternative Desktops for User Sessions (OGC only)
- Ruler Provided in Editor Window (OGC only)
- New Reports for Monitor Performance Analyses (OGC only)
- New Scheduling Function for Single Networks (OGC only)
- New Hyperlink Option for Network and Job Descriptions (OGC only)
- Enhanced Reporting Function (OGC only)
- Enhanced Import/Export Function (OGC only)
- Append to Export File Renamed to Export (OGC only)
- Resubmitting Several Active jobs at once (OGC only)
- Active Conditions List: Date and Time Apply to Modification Time instead of Activation Time
- Next Scheduled Network Starts: Deactivate All active Networks in One Step
- Some Adaptations for the ESM Adapter (BS2000)

#### Installation/Setup: Changes to LFILE Assignments

The following changes have been made to the logical system files (LFILEs) used by Entire Operations:

- LFILE (85): The name of the file assigned to this LFILE has changed from LFILE 085 to NOP Account-Data.
- LFILE (173): This LFILE is no longer delivered.
- LFILE (215): This LFILE is now assigned to the file NOP-LOG-SELECT-1.

You can use the Natural system command SYSPROF to view all LFILE assignments in your current Natural environment.

#### **Extended Log for Accounting Data**

Additional fields have been defined for the DDM EOR-LOG-SELECTION-1 to support selection of additional log data using LFILE 215 (see *Installation/Setup: Changes to LFILE Assignments*.

For more information, see Selection File - Format 1 in the User's Guide.

#### Support for Password Phrases for Logons to z/OS Nodes

In addition to passwords of up to 8 characters, the **Node Logon** function for z/OS nodes now also supports the use of password phrases that can be in the range from 9 to 32 characters.

For more information, see the description of the **Password** field in *Fields: Node Logon* the *User's Guide*.

#### Support for Long Passwords for Logons to BS2000 Nodes

The **Node Logon** function for BS2000 nodes now also supports the use of long passwords of up to 32 characters.

For more information, see the description of the **Password** field in *Fields: Node Logon* the *User's Guide*.

#### New Monitor Defaults Option to Suspend Entire Operations Functions

The **Monitor Defaults** administration function now provides the option to suspend Entire Operations functions (for example, network activation and job submission) for selected owners, networks and jobs. This helps to reduce the workload after disaster recovery.

For more information, see *Defining Filters to Suspend Entire Operation Functions* in the *Administration* documentation.

#### **New Default Settings for User Node Access**

The user maintenance function now provides the following new options to define default settings for node access in a user profile:

- Specification of a default node user ID for node logon.
- Specification of a default node user ID for automatic node logon to browse JCL and/or SYSOUT.

For more information, see *Defining Node Default User IDs* in the *Administration* documentation.

For changes to multiple user profiles, see also Mass Update for User Node Access (NOP only).

#### Resource Allocation Option to Exclude Temporary Dummy Jobs

(with Version 5.5.1 CF 03)

The new **Allocation Mode** option can be used to determine whether the resource defined as a prerequisite for a job is allocated when the job executes as a temporary dummy job.

The allocation mode set is indicated in a list of prerequisite or allocated resources that can be displayed for a job master or job active, and in an active usage list that can be displayed for a resource.

As a consequence, the resource API column (previously, column **A**) of the active resource usage list has been renamed to **API**.

For more information, see Columns and Fields: Prerequisite Resource Definitions in the User's Guide.

#### No Job Restrictions for Resource Allocation

(with Version 5.5.1 CF 01)

Any job restrictions on the resource allocation feature have been removed. Resources can now be allocated for all types of jobs (including DUM/**Dummy Job**) and all kinds of temporary dummy jobs.

For information on resources, see *Use of Resources and Resource Allocation* in the *User's Guide*.

#### **New User Access Rights for Active Prerequisite Resources**

(with Version 5.5.1 CF 01)

The **Monitoring** function settings of the user profile can now be used to define different access rights for active prerequisite resources.

As a consequence, the default setting for **Resource Usage** has changed to read access (R) only for a general user.

For more information, see **Active Prerequisite Resources** and **Resource Usage** under *Monitoring Functions* in the *Administration* documentation.

#### Renamed User Access Option for JCL Editing

(with Version 5.5.1 CF 01)

The **Act. JCL Definitions** option of the **Monitoring** function settings of the user profile has been renamed to **Active JCL Editing**.

See also **Monitoring Functions** in the *Administration* documentation.

#### Schedule Dependencies with Exact Month and Day of the Year

The **Schedule Dependency Definition** function now provides the option to specify the exact month and day of the year (for example, February 28) for executing a network, job and/or an input condition. This is a useful alternative to specifying a relative period, which involves the risk that the day calculated for network execution is skipped, for example, in leap years.

For more information, see *Fields: Schedule Dependency Definition* in the section *Schedule Maintenance* in the *User's Guide*.

#### New Scheduling Option: Calendar Day or Workday Later for Start and Deadline Times

The days later that can be defined for start and deadline times of a network schedule or job schedule can now be classified as a calendar day or a workday that refers to a linked calendar.

For more information, see *Defining a Network Schedule* and *Defining Scheduling Parameters for a Job* in the *User's Guide*.

For the corresponding syntax enhancements used for the network and job definitions in the Entire Operations object import/export files, see *OBJECT=NETWORK-MASTER* and *OBJECT=JOB-MASTER* in the *Import/Export Functions* documentation.

#### **Job Scheduling: History Elapsed Times for Multiple Active Jobs**

(with Version 5.5.1 CF 01)

The **History Elapsed Time** table of the **Scheduling Parameters** window now also holds data for multiple active job runs. Therefore, the number of table entries in the CUI window has been increased to 20.

For more information, see *Fields: Scheduling Parameters* in the **User's Guide**.

#### Retention Period for Single Networks

You can now specify a retention period for a single network, in addition to the default retention periods you can specify in the Entire Operation defaults. The retention period sets a minimum time for retaining the network (if activated) in the active database.

For more information, see the **Retention Period for Network** option described in the *User's Guide*.

#### **Retention of Active Conditions**

(with Version 5.5.1 CF 01)

You can now specify a deactivation mode for active conditions for a single network, in addition to the default retention period for active conditions you can specify in the Entire Operation defaults. The deactivation mode determines when active conditions are removed from the active database.

For more information, see the **Deactivation Mode for active Conditions** described in the *User's Guide*.

#### Changed Retention Periods for OGC Import/Export Requests and Reports

The retention period for data generated for import/export requests and reports from Entire Operations GUI Client has changed to the period that applies to active jobs (default of 2 days). Before, the period for standard logs (default of 7 days) applied.

Older import/export requests and reports listed in the **Import/Export** and **Reporting** windows of Entire Operations GUI Client are automatically deleted after this period or when the next database cleanup is performed.

#### **Network Master: Copying Defaults to Jobs with User ID**

The **Application of Network Defaults to Jobs** option of the network maintenance function has changed: the default for **Modifying User** is now set to A (all) to ensure that any copy operation identifies the user who copied the defaults. This option setting is generally preferable.

See also Applying Network Defaults to Jobs (Mass Update) in the User's Guide.

#### **Support for Long Symbol Values**

The symbol maintenance function has been enhanced to support symbol values of up to 120 characters.

See also Fields: Symbol Modification and Fields: Input Condition Symbol Value in the User's Guide.

#### Increased Maximum Value for Multiple-Value Symbols

The maximum number of values that can be defined for multiple-value symbols has been increased to 150 values.

See also Defining Multiple Symbol Values in the User's Guide.

#### Import/Export: Increased Maximum Size for Multiple-Value Fields for Symbol Masters

The import/export functions for symbol masters now support a maximum of 120 values and 150 occurrences for multiple-value fields.

For more information, see the fields VALUE and MULT-VALUE in the section *OBJECT=SYMBOL-MASTER* in the *Import/Export Functions* documentation.

#### Reserved Symbols Provided as UNIX and Windows Environment Variables

UNIX and Window environment variables can now be specified as reserved symbol names by using the Natural text object NOPVS001 supplied in the SYSEORU system library.

As a result, the length limits of relevant preserved symbol names have been increased as indicated in *Table of Predefined Symbols* in the *User's Guide*.

For more information, see *Reserved Symbols for UNIX and Windows Environment Variables* in the *User's Guide*.

#### Reserved Symbol for Epilog Scripts on UNIX and Windows

(with Version 5.5.1 CF 01)

The new reserved symbol NOP-EPILOG-execution\_node is provided to execute epilog scripts for jobs submitted on UNIX or Windows nodes.

For more information, see Reserved Symbol for Epilog Scripts (UNIX and Windows) in the User's Guide.

#### **New Predefined Symbols for Escape Character Replacements**

The new predefined symbols P-ESC-ACT and P-ESC-SUB can be used to replace current activation and submission escape characters during job activation and/or submission.

For more information, see P-ESC-ACT and P-ESC-SUB in *Table of Predefined Symbols* in the *User's Guide*.

#### **Nested Symbols in CMDLINE-job**

Additional information regarding the handling of nested symbols in a CMDLINE-job symbol is now provided in the section *Command Line Passing to Shell Scripts in Entire Operations* in the *User's Guide*.

#### **Usable Symbol Tables: Version of Active Network Listed**

The table returned by the **Usable Symbol Tables** function now also contains a column that indicates the version (if available) of an active network which uses a listed symbol table.

See also Listing Usable Symbol Tables in the User's Guide.

#### Job Input Condition: Symbol Check in Active Symbol Tables or Symbol Table Masters

The job input condition function for symbol checks now provides the option to specify whether active symbol tables or symbol table masters are used for symbol checks.

For more information, see the new **Instance** option, described in *Fields: Input Condition Symbol Value* in the *User's Guide*.

#### **End-of-Job Action: Mandatory Fields for Correct Message Sending**

The fields provided to send a message after job termination are now checked for completeness to assure correct processing. If you leave a mandatory field blank, you cannot save the message definition.

For more information on mandatory fields, see Defining Notification Messages in the User's Guide.

## End-of-Job Action: Message Sending Node Improved

Evaluation of the message sending node has been improved:

(with Version 5.5.1 CF 01)

The display of a node in numeric (N) format now works properly for a message sending node (see also *Representation - Display Settings* in the *Administration* documentation).

(with Version 5.5.1 CF 02)

The node definition used for message sending can contain a symbol (for a usable node number) that is prefixed with the activation escape character.

For more information, see the field **Node** and the **Use symbol as node** option (OGC only) described in *Fields and Columns: Message and Message Recipients*) and the section *Symbols in Node Definitions* in the *User's Guide*.

#### **Total Run Number Removed to Improve Performance**

The total number of active job runs is no longer indicated in the **#Run** column of a network list screen (see the *User's Guide*). It has been replaced by the **Runs** column which shows an asterisk (\*) when one or more active runs exist.

The benefit (if any) of knowing the exact number of runs does not justify the many database calls required to calculate this number.

#### **API Parameter Definitions Enhanced for more Flexibility**

(with Version 5.5.1 CF 03)

The parameter definitions of the following API subprograms have been enhanced for more flexible CALLNAT program calls.

#### API NOPUAC5N - Activate Job Networks or Jobs:

Parameter	New Option/Change
RC	BY VALUE RESULT
	Additionally, the format/length has changed from N3 to N4.
DBENV	BY VALUE OPTIONAL
OWNER	BY VALUE
NETWORK	BY VALUE
NETWORK-VERSION	BY VALUE OPTIONAL
SYMTAB	BY VALUE OPTIONAL
SYMTAB-VERSION	BY VALUE OPTIONAL

Parameter	New Option/Change
RUN	BY VALUE RESULT

## API NOPULW9N - Write Messages to System Automation Tools Log:

Parameter	New Option
P-TASK-ID	BY VALUE
P-MESSAGE-CODE	BY VALUE
P-MESSAGE	BY VALUE
P-DBENV	BY VALUE OPTIONAL
P-OWNER	BY VALUE OPTIONAL
P-NETWORK	BY VALUE OPTIONAL
P-NETWORK-VERSION	BY VALUE OPTIONAL
P-RUN	BY VALUE OPTIONAL
P-JOB	BY VALUE OPTIONAL
P-JOB-ID	BY VALUE OPTIONAL
P-USE-NAT-MSG-CACHE	OPTIONAL

#### API NOPUMI1N - Set/Reset Text Milestones in Master and Active Jobs:

Parameter	Changed Option	
P-JOB	BY VALUE OPTIONAL	
	(before: BY VALUE RESULT OPTIONAL)	

APIs of previous Entire Operations versions are compatible and must not be changed.

For more information, see Available Entire Operations API Routines in the User's Guide.

## API NOPUNX1N: Large Buffers Allowed for UNIX and Windows Files

API NOPUNX1N has been enhanced to define large buffers that can contain data of extensive files from a UNIX or Windows environment.

For more information, see NOPUNX1N: Entire System Server Calls to Access UNIX and Windows Files in the User's Guide.

#### API NOPUSY6N Replaced by NOPUSY7N

API NOPUSY6N (Access Entire Operations Symbols) is obsolete and no longer supplied. It has been replaced by API NOPUSY7N.

# New API NOPUSY7N: Access Entire Operations Symbols

This API is an updated version of API NOPUSY6N. In addition to the features previously supplied with NOPUSY6N, it provides a new function to read symbols and symbol values with recursive resolution from an active symbol table.

For more information, see NOPUSY7N in the *User's Guide*.

### **New Accounting Facility for Collecting Monitor Function Data**

You can use the new Monitor Accounting facility to collect data from Entire Operations Monitor tasks and functions performed by the Monitor and exits called by the Monitor. This can help you identify potential bottlenecks and improve the performance of the Monitor.

The accounting data collected can be analyzed by using the new report types provided by Entire Operations GUI Client: See *New Reports for Monitor Performance Analyses* (*OGC only*).

For more information, see *Monitor Accounting* in the *Administration* documentation.

#### **Accounting Data Functions Renamed**

All **Accounting Data** screens and windows have been renamed to **Accounting Information**.

This affects the reporting and accounting information functions.

See also Viewing Job/Network Accounting Information and Reporting in the User's Guide.

With Version 5.5.1 CF 03, in addition, the **Job Accounting/Job Accounting Data** option of the reporting functions provided for user maintenance has been renamed to **Accounting Information** (see also *Reporting Functions* in the *Administration* documentation).

#### SYSOUT Line Limit Settings

#### SYSOUT Line Limit Option Moved to Default Setting (4) - NOP only

The **SYSOUT Line Limit** option is now contained on the **Default Setting (4)** screen. It used to be on the **Default Setting (2)** screen.

#### New SYSOUT Line Limit Option for Job Interruption on BS2000

A new SYSOUT line limit option is provided to interrupt jobs during End-of-Job checking on BS2000 systems when the limit is reached.

For more information, see the SYSOUT options in *Default Setting (4)* in the *Administration* documentation.

### Changes to Return Codes for Input Condition User Exits (ICO)

Return codes are now handled differently if set for job input conditions with DUM references for user exits of the type ICO. For details, see *Return Code Settings for an Input Condition User Exit* in the section *Input Condition with User Exit* in the *User's Guide*.

See also Parameters Used for Different Call Places in the section Common User Exit Parameter Data Area NOPXPL-A in the User's Guide.

# **Active Jobs: Reasons for Temporary Dummy Execution**

The active job definition now provides a **Dummy Flags** field that indicates the reason why a job executed as a temporary dummy job. For possible reasons, see the field description in *Fields: Maintenance Job Active* in the *User's Guide*.

For OGC only: The reason for a temporary dummy execution is also indicated in the active job symbol in the network diagram as described in *Explanations of Diagram Symbols* in the *User's Guide*.

# Improved Message for Successful Subnetwork Runs

When a job of the type subnetwork (NET) ends successfully (for example, after finding a NET-END condition or not finding a NET-END-NOTOK condition), Entire Operations now returns the message Subnetwork ended ok, instead of Sub-Nw terminated.

#### **Receiver Renamed to Recipient**

The term "receiver" has been replaced by the term "recipient" in all relevant Entire Operations functions (for example, Global Messages for Events) and online help texts. This changed does not affect any field names used as syntax keywords for import and export operations.

#### **Cross-References: Report and Menu Sequence Changed**

#### Symbol Search by Value Renamed

The report type **Symbol Search by Value** has been renamed to **Symbol and Symbol Value Search**. See also *Types of Cross-Reference Reports* in the *User's Guide*.

#### Changed Sequence of Menu Items (NOP only)

The sequence of items in the **Cross-References** menu has changed (see *Cross-References* in the *User's Guide*). As a result, the option number assigned to a menu item may have changed.

## Cross-References: Refined Search for JCL Usage Reports

The name qualifier that can be used to select a range of files or libraries for cross-reference reports about JCL usage, can now also contain more than one leading or trailing asterisk (\*) wildcard.

See also the File/Natlib field described in Fields and Columns: Cross-References in the User's Guide.

### Copying Objects from a Secondary System File no Longer Supported

It is no longer possible to copy Entire Operations objects by using a secondary (alternate) system file as the source file. The logic constructs required to enhance the copy function does not support secondary files.

See also Enhanced Copy Function for Entire Operations Objects (NOP only).

## Utility for User ID Mass Update Enhanced

(with Version 5.5.1 CF 04)

The US-UPD-P utility has been enhanced to provide additional selection and replace options for user IDs to be listed or changed for networks and jobs. For example, you can now list jobs and networks with undefined user IDs and restrict an operation to a particular job type or network version.

For more information, see User ID Mass Update in Network and Job Definitions in the User's Guide.

#### Utility for Owner Deletion Replaced

The OW-DEL-P utility is no longer available. It was used to delete an owner and all related references.

Its functionality is covered by the P-OWNER-NEW = ==DELETE== option of the OW-MB--P utility.

For more information, see Mass Change of the Owner and Owner Deletion in the User's Guide.

#### **End-of-Job Action: Text and File Attachments for Messages**

The **Message and Message Recipients** option of the End-of-Job (EOJ) actions function now allows additional message text and file attachments for e-mails.

For more information, see Defining Notification Messages in the User's Guide.

# End-of-Job Action: Symbol Setting Window Rearranged (NOP only)

The fields provided in the **Symbol Setting** window have been rearranged for more comfortable handling.

See also Defining Actions for Symbol Value Modification in the User's Guide.

## Mass Update for Files Passed to Entire Output Management (NOP only)

The N002045A program supplied in the Natural SYSEOR system library provides the option to set the flag **Pass SYSOUT to Entire Output Management** and perform a bulk update of files to be passed to Entire Output Management.

#### Node Selection Options for Network Lists (NOP only)

You can now filter a network list according to a specified node number, a node name or a range of names.

For more information, see *Listing all Network Definitions* and *Listing Active Job Networks* in the *User's Guide*.

## **Enhanced Copy Function for Entire Operations Objects (NOP only)**

The screens provided to copy networks, jobs, schedules and symbol tables (for example, the **Job Master Definition Copy** screen) have been enhanced for easier handling. The source fields of an object selected for copying are now, for example, write-protected to avoid wrong input and corresponding error messages.

For more information, see the following sections in the *User's Guide*:

- Copying Job Network Definitions
- Copying Job Definitions
- Copying Schedule Definitions
- Copying a Symbol Table Master

## Active Job Conditions: Filtering Result Lists by Run Numbers (NOP only)

You can now also specify a run number as a filter criterion for the conditions listed on an **Active Job Conditions** screen. The list then displays the conditions for the specified run only.

See also Listing Active Conditions in the User's Guide.

### New Browse Command to View Sources and Settings (NOP only)

A new B (Browse) line command is now available on several list screens to view sources and object definitions in read-only mode instead of edit mode. This clearly distinguishes display from modify functions and avoid inadvertent changes.

Users with read-only permissions can still perform modify or edit functions but are only authorized to view text.

The following are examples of where the browse command is available.

#### Browse Source from a Job List

Displays the JCL or Natural source for a job listed on a maintenance or active jobs screen (see *Listing Jobs* in the *User's Guide*).

#### **Browse End-of-Job Event Definition**

Displays a job event definition selected from the **End-of-Job Checking + Actions** screen (see *Defining and Managing End-of-Job (EOJ) Checking and Actions* in the *User's Guide*).

#### **Browse User Definition and Profile**

Displays the profile of a user selected from the **User List** screen of the **User Maintenance** function (see *Listing Users* in the *Administration* documentation).

### Mass Update for User Node Access (NOP only)

The new NOPUNA-P utility provides the option to add or update multiple users for node access.

For more information, see Mass Update for User Access to Nodes in the User's Guide.

For corresponding changes of the user maintenance function, see *New Default Settings for User Node Access*.

# Changes to the System Services Menu (NOP only)

The new **Monitor accounting** facility has been added as a new option to the **System Services Menu** (*Administration* documentation). Therefore, the menu items were reordered, and the option number assigned to an item may have changed.

### List of Active Jobs now Available for Next Network Starts (NOP only)

The **Next Start Times** window and the **Next scheduled Network Starts** screen of the **Network Maintenance** function now provide the new line command A (Active Jobs) to list all active jobs for a selected network run.

For more information, see *Displaying Next Network Starts - Single Network* and *Displaying Next Network Starts - System-Wide* in the *User's Guide*.

### Filter for List of Current Network Versions (OGC only)

(with Version 5.5.1 CF 03)

The **Filter** function now provides the option to reduce the number of network versions shown in the tree view or in a **List** window to a single (current) network version.

For more information, see Listing Current Network Versions Only in the User's Guide.

# Symbol Table: Improved Information for Where Used Function (OGC only)

The **Type** column of the **Where used Symbol Table** and **Active Usage Symbol Table Active** windows now indicates whether a job master, job active, network master/version or network active is associated with a listed symbol table. This complies with the information provided on the corresponding column on a CUI screen. The Def. and Run column entries are no longer shown.

See also Columns: Symbol Table Usage in the User's Guide.

#### Mass Update for Execute if Temporary Dummy (OGC only)

The new **Mass update** function can be used to modify the setting of the **Execute if temporary dummy** option for multiple job masters selected in a list window or network diagram.

For more information, see Changing Execute if Temporary Dummy Settings for Multiple Jobs in the User's Guide.

## Global Object Filter for Users (OGC only)

The filter settings in a user profile now also provide the option to specify a global filter that overrides any other filters set by the user. The objects you can specify for global filtering include network masters and networks active, symbol table masters, calendars, schedules and resource masters.

For more information, see Filter in the Administration documentation.

### Alternative Desktops for User Sessions (OGC only)

The **My Desktop** option has been enhanced to use between different desktop customization settings for an Entire Operations session.

For more information, see *Using Alternative Desktops* in the *User's Guide*.

### Ruler Provided in Editor Window (OGC only)

The source editor now provides a new toggle function to show or hide a vertical ruler in the editor window. In addition, the ruler display can be set in the **GUI General** options of the user profile.

For more information, see *Starting an Edit Session* (*User's Guide*) and *GUI General* (*Administration* documentation).

# New Reports for Monitor Performance Analyses (OGC only)

The **Reporting** function provides the following new types of reports:

- A Monitor Tasks and Functions Overview report that shows data collected from performed Monitor tasks and called Monitor functions in an interactive diagram with task time table (see the *User's Guide*).
- A **Monitor Tasks and Exits Overview** report that shows data collected from performed Monitor tasks and called Monitor exits in an interactive diagram with task time table (see the *User's Guide*).

Prerequisites for report generation:

- Monitor accounting must be enabled to collect Monitor data: See New Accounting Facility for Collecting Monitor Function Data.
- The **Monitor accounting** option must be enabled in the **Reporting Functions** in the user profile (see the *Administration* documentation) to generate the new reports.

The new reports can also be generated in batch mode by using the new report types AC1 and AC2: see *Command - Object: Reports - Name: Add* in the *User's Guide*.

## New Scheduling Function for Single Networks (OGC only)

The new **Define Scheduling** context function is now available for a network master listed in the object workspace. This function is used to add, modify and delete schedule definitions for a selected network.

**Define Scheduling** replaces the maintenance options previously provided on the **Scheduling** page of a network. The **Scheduling** page now only contains protected fields for information only.

For more information, see Defining a Network Schedule in the User's Guide.

## New Hyperlink Option for Network and Job Descriptions (OGC only)

You can now enter a URL address in the long description for a network master, job master or an End-of-Job event. The URL can then be used as a hyperlink to open the page associated with the address.

For more information, see the following sections in the *User's Guide*:

- Long Description Documenting Your Networks
- Writing and Viewing Online Documentation for a Job
- Viewing Long Descriptions of Active Jobs
- Creating and Viewing Online Documentation for Events

# **Enhanced Reporting Function (OGC only)**

The **Reporting** function provides the following new features:

An option is provided to regenerate a report using the same (or modified) properties settings of a previously generated report.

For more information, see Generating or Regenerating Online Reports in the User's Guide.

- The properties settings used for generating a report are now indicated in the new **Properties** column of the **Reporting** window.
- The **Delete** command can now be used to delete multiple reports selected in the **Reporting** window.

## **Enhanced Import/Export Function (OGC only)**

The **Import/Export** function provides the following new features:

- An option is provided to repeat an import or export operation using the same (or modified) properties settings of a previously processed import or export request.
  - For more information, see *Repeating an Import or Export Operation* in the *Import/Export Functions* documentation.
- The properties settings used for repeating an import or export operation are indicated in the new **Properties** column of the **Import/Export** window.
- The Delete command can now also be used to delete multiple requests selected in the Import/Export window.

### Append to Export File Renamed to Export (OGC only)

The **Append to export file** function in a maintenance window has been renamed to **Export** to avoid misinterpretations. The settings exported from a maintenance window are only appended if a Natural library object (not a file) is used as the target destination.

See also *Exporting Current Settings* in the *Import/Export Functions* documentation.

# Resubmitting Several Active jobs at once (OGC only)

Several active jobs can be resubmitted at once without confirming each one individually. Selection of the active jobs is made in the content pane.

For further information, see *Resubmitting Active Jobs* in the *User's Guide*.

#### Active Conditions List: Date and Time Apply to Modification Time instead of Activation Time

The following corrections were made:

- 1. In the view EOR-CONDITION-ACTIVE, the settings of the fields N-CREATION-TIME and N-MOD-TIME have been corrected so that they can be displayed in the **Active Conditions** list.
- 2. In the **Active Conditions** list, the fields in the columns **Date** and **Time** now will display the date and the time when the condition was set or modified (as was already documented). Previously they showed the date and time of activation.

For further information, see *Columns and Fields: Active Conditions* in the *User's Guide*.

# Next Scheduled Network Starts: Deactivate All active Networks in One Step

(with Version 5.5.2 CF 02)

In the batch utility TA-DEL-P, the parameters owner and network have been added for selection.

For further information, see *Parameters* and *Examples* in *List or Delete TO-ACTIVATE Command Records* in the *User's Guide* documentation.

## Some Adaptations for the ESM Adapter (BS2000)

(with Version 5.5.2 CF 02)

1. ND-INF-P:

Added EOR-OPSYS-SERVER.ND-NPR-PRODUCT with default NPR. If SYSTEM-INFO.MODE = 'ADAPTER', EOR-OPSYS-SERVER.ND-NPR-PRODUCT will be set to ESA (ESM Adapter).

2. ND-IN--P:

Either NPR or ESA is displayed as NPR product.

3. OPENCF-A (for OGC and NOW):

Added new attribute:

```
* -- V EOR 552 CF2 ff. /* N3641
3 NPR-PRODUCT A 3 /* N3641
* 'ESA' ESM Adapter /* N3641
* 'NPR',' ' Entire System Server /* N3641
```

4. ND-NPL-P:

Logon map invocation for BS2000 (NPR and ESA) nodes corrected.