



NATURAL

Entire System Server

Release Notes

Version 3.1.2 for Mainframes

 SOFTWARE AG



This document applies to Version 3.1.2 for Mainframes 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

Besides the Entire System Server Version 2.2.2 Release Notes, this page contains an overview of earlier Release Notes which are relevant for customers who want to migrate from an earlier Entire System Server version to Version 2.2.2.

-  [Entire System Server Version 3.1.2 Release Notes](#)
-  [Entire System Server Version 3.1.1 Release Notes](#)
-  [Entire System Server Version 2.2.2 Release Notes](#)
-  [Entire System Server Version 2.2.1 Release Notes](#)



Important Note: The Release Notes of Entire System Server Version 2.2.1 and Version 2.2.2 are provided **for background information only!** References contained in the Version 2.2.1 Release Notes generally refer to the corresponding Version 2.2.1 manuals which are included in the Version 2.2.2 documentation set as PDF files only. Formal differences to the current release documentation may exist, for example, Software AG product names (Natural, Adabas, etc.) are written in capital letters.

Entire System Server 3.1.2 Release Notes

For further information, you should also read the Entire System Server 3.1.1 Release Notes which are delivered with Version 3.1.2 on the current Natural Documentation CD-ROM and in printed form.

References contained in the Version 3.1.1 Release Notes generally refer to the corresponding Version 3.1.1 manuals which are included in the Version 3.1.2 documentation.

These Release Notes provide an overview of solved problems provided for Entire System Server 3.1.2.

This document covers the following topics:

- Support of Previous Versions
 - Prerequisites
 - Solved SAGSIS Problems on z/OS and OS/390
 - Solved SAGSIS Problems on VSE/ESA
 - Solved SAGSIS Problems on BS2000/OSD
 - Changes with the Next Version
-

Support of Previous Versions

Note that with the release of Entire System Server 3.1.2, versions of Entire System Server lower than 2.2.2 can no longer be supported. You are therefore strongly advised to migrate to the current version at your earliest convenience.

The restrictions for OS/390 JES3 installations described in the Entire System Server Version 3.1.1 release notes also apply to this maintenance level. If your applications need the missing functionality for the JES3 interface or you are using Entire Output Management (NOM), you must not install Entire System Server Version 3.1.2. Instead, you have to use Entire System Server Version 2.2.2, until the missing functionality of the JES3 interface is implemented in the next release of Entire System Server.

Prerequisites

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

- Natural Version 3.1.4 or above;
- Adabas Version 7.1.2 or above;
- Entire System Server Interface (provided with Natural);
- Entire Net-Work Version 5.6.1 (optional, for multi-CPU Support);
- Predict Version 4.1.2 or above (optional).

The Entire System Server Services are available in any Natural environment that runs any or a combination of the following operating systems:

- OS/390 Version 2.6 or above; or z/OS Version 1.1 or above
- VSE/ESA Version 2.4 or above;
- BS2000/OSD Version 2 or above.

For OS/390, JES2 the PTF's for APAR's OW35104, OW36019, OW44349 and OW52411 must be applied.

For OS/390, JES3 the PTF's for APAR's OW34753, OW36019, OW36022 and OW44298 must be applied. See also Information APAR III1784 for recommended JES3 SAPI maintenance.

Since Entire System Server on BS2000/OSD is using operating system interfaces introduced with BS2000/OSD Version 2, it cannot run on former operating system versions.

Software AG provides Entire System Server support for the operating system versions supported by their respective manufacturers. Generally, when an operating system provider stops supporting a version of an operating system, Software AG will stop supporting that operating system version.

Although it may be technically possible to run a new version of Entire System Server on an old operating system, Software AG cannot continue to support operating system versions that are no longer supported by the system's provider.

If Natural ISPF is used, Version 2.4.3 or above is required to support the new Entire System Server version.

If Natural ISPF Version 2.4.2 is used, the solutions for the following problems have to be installed:

z/OS and OS/390:

Problem	Solution	Description
195165	IS24204	Error NAT1305 in ISPJLS1P / 5580 Numeric value truncated

BS2000/OSD:

Problem	Solution	Description
202180	IS24205	Browse / Find in LMS elements slow.

Solved SAGSIS Problems on z/OS and OS/390

Problem	Short Description
168615	NAT0954 on IF ERROR-CODE
190497	RLSE not releasing unused space
190840	Lib-update doesn't scratch
200106	Rename dataset ACF2 message
201694	Fields not filled, DIS-WTOR
204122	No user-id from NATPROC-USERS
204214	Lib-update: alias not correct
204241	Submit: error ES8? close handling
204415	ESY5580 with PDSE dataset
204453	View unit-attrib./diff. results
204562	Abend S0C4 with LOAD-MODULE IDR
204564	Abend S0C7 in XCOMV044+X'2A04'
204691	LOAD-MODULE DATX field incorrect
204789	IDR-TYPE LINK not found for PDS

Problem	Short Description
205162	UNIT-HEX conflicts with UNIT
205168	List active job with NSPF
205443	SOC1/TRACE error msgs at init
205507	ESY0580I SSI req. 80 STATREAS 2
205588	Subtask already active
205745	Read / copy load-module
205747	ACTIVE-JOBS with JOB-NAME=blank
205749	Spool-queue groupid 8 chars
206029	Operator cmd not working
206097	Opcmd TRACE=Y & TRACE=PREP error
206126	Copy-file to PDSE replace ignor
206334	Find by group-id
206372	Submit does not set JOB-ID
206385	ICH409I OC4-010 ABEND at logoff
206452	Spool-queue: card-count not set
206624	Scan case sensitive
206627	S213-8C with HFS
206693	Scan-length with scan-type=A
206808	CC for cond.code doesn't work
206812	S001, IEC020I 001-03
206813	SOC4 in XCOMV012 at X'0AC4'
206927	ESY5580 instead of ESY5998
206928	IDR-TYPE=ZAP on PDSE data set
206981	Overview of applied zaps
206982	Invalid JES2 Cmd \$TSTC(nnn),C=c
207197	Recall not migrated data set
207224	Displaced data if unknown MU fld
207307	Lib-directory on load lib TTR
207404	LIB-ZAP to PDSE returns AMA129I
207618	SOC4 in READCONS at X'0A1C'
207760	TYPE SM sysout data set not found
207776	Duplicate spool data sets found
207864	Wrong dataset allocated for ALIAS
208404	WRITE-FILE REPLACE PDSE ignored
208939	READ-FILE receives ESY5996

Problem	Short Description
209011	S0C4 when data set PASSWORD spec.
209065	SPOOL-FILES with HOLD=YES, update
209528	Hang in xcomvtop
209604	Support for JES2 z/OS 1.2
209623	COPY-FILE for ALIAS incorrect
209821	SYNCDB does not support DBID>999
209921	Abend S0C4 in XCOMALCF +X'176'
210219	NAT RC cmds w/CIDs missing view
210395	ESY5785 CVAFTST failed with RC
210620	FIND CONSOLE-LOG log-job-name
210630	Allocation not released for PDS
210657	Sporadical esy5631
210854	Console-log: scan not used proper
210872	S0C4 esynmain+x3F1A
210959	ESY000II NO OUTADD CALLED
211028	Correct GMT/local time adjustment
211085	SPOOL-FILES release new-class
211093	SPOOL-FILES invalid NEW-CLASS
211114	FILE-ATTRIBUTES of uncatlg PDSE
211537	Wrong PDSE IDR data
211588	Free space not shown correctly
211614	Copy PDS member to uncat. Dataset
211682	Wrong MODULE-LENGTH returned
211867	Duplicate SPOOL-QUEUE entries
212046	ESY0563I \$CBIO failed, RC 12
212050	SPOOL-QUEUE finds wrong CLASSes
212117	Abend S0C1 in TRACE at X'05E6'
212186	ABEND S130
212405	VTOC-update doesn't check catalog
212444	VTOC shows incorrect EXTENT-TYP
212464	VTOC extent not listed
212488	NAT5719 Unable to..SYSOUT dataset
212550	TRACE defaults incorrect
212880	Copy-file module to pdse
212906	ESY5602 in CATALOG-UPDATE

Problem	Short Description
204851	How to pass on account numbers
206328	Wrong time stamps in TRACE data
206563	Zero RECORD with READ-FILE is blank
206733	Keep TSN in inactive SERVER TYPIO
206747	Support zero AREA in MAIN-STORAGE
209833	NPR corrupts/truncates jobs
210304	FILE-ATTRIBUTES internal error
210486	NATPROC-USERS incomplete data
210689	HELP-INFO corrupted data
210706	SYSTEM-INFO wrong SESSION-NUMBER
210734	Zero DATA in COMMON-DATA is blank
210767	Zero MESSAGE in EVENTING is blank
211203	Displaced data if unknown MU field
212941	Number of USER CB's exceeded
216734	Binary data returned left justified

Changes with the Next Version

With the next version of Entire System Server, the following changes will be implemented:

1. The JOB-ID and JOB-NUMBER fields in the spool related view processors will be expanded to provide support for seven-digit job numbers.
2. The LOAD-MODULE view processor will use the Binder API to obtain information on load modules in both PDS and PDSE libraries, resulting in a consistent format of data fields like IDR-DATA.
3. Fields and functions related to CVOLs will be removed from the DDM for CATALOG-UPDATE. CVOLs are no longer supported as of January 1st, 2000.
4. The OPTIONS field for view WRITE-FILE will be renamed to PRODUCT-OPTIONS to avoid a potential conflict with the Natural reserved word used with the Optimizer Compiler.
5. XEND and ADAEND Commands
It has come to our attention that the undocumented XEND command is being used by some customers to shut down an Entire System Server region. ADAEND is the only documented and supported command to be used to normally shut down a region. XEND will disappear in a future release of Entire System Server.
6. User views SEQUENTIAL-FILE-READ and SEQUENTIAL-FILE-WRITE
Support of user views SEQUENTIAL-FILE-READ (file number 100) and SEQUENTIAL-FILE-WRITE (file number 202) will be dropped with the next release of Entire System Server.

Entire System Server 3.1.1 Release Notes

These Release Notes provide an overview of all changes for Entire System Server 3.1.1.

This document covers the following topics:

- Support of Previous Versions
 - Prerequisites
 - Restrictions
 - New Features
 - Changes/Enhancements
 - Solved SAGSIS Problems
 - Cancelled Support
-

Support of Previous Versions

Note that with the release of Entire System Server 3.1.1, versions of Entire System Server lower than 2.2.2 can no longer be supported. You are therefore strongly advised to migrate to the current version at your earliest convenience.

Prerequisites

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

- Natural Version 3.1.3 or above;
- Adabas Version 6.2.1 or above;
- Entire System Server Interface (provided with Natural);
- Entire Net-Work Version 5.4.1 (optional, for multi-CPU Support);
- Predict Version 3.4.2 or above (optional).

The Entire System Server Services are available in any Natural environment that runs any or a combination of the following operating systems:

- OS/390 Version 2.6 or above;
- VSE/ESA Version 1.4.4 or above;
- BS2000/OSD Version 2 or above.

For OS/390, JES2 the PTFs for APARs OW35104, OW36019 and OW44349 must be applied.

For OS/390, JES3 the PTFs for APARs OW34753, OW36019, OW36022 and OW44298 must be applied. See also Information APAR III1784 for recommended JES3 SAPI maintenance.

Since Entire System Server on BS2000/OSD is using operating system interfaces introduced with BS2000/OSD Version 2, it cannot run on earlier operating system versions.

If Natural ISPF is used, Version 2.4.3 is required to support the new Entire System Server version.

If Natural ISPF Version 2.4.2 is used, the solutions for the following problems have to be installed:

OS/390:

Problem	Solution	Description
195165	IS24204	Error NAT1305 in ISPJLS1P / 5580 Numeric value truncated

BS2000/OSD:

Problem	Solution	Description
202180	IS24205	Browse / Find in LMS elements slow.

Restrictions

The restrictions described in this section apply only to **OS/390 JES3 installations**.

- Input JCL (JESJCLIN) and SYSIN Datasets are not selectable. (READ-SPOOL, SPOOL-FILES)
- Active SYSOUT Datasets (not yet closed and freed) are not selectable (READ-SPOOL, SPOOL-FILES). This includes the active SYSLOG (CONSOLE-LOG).
- UPDATE authority is required to access spool datasets. (READ-SPOOL, SPOOL-FILES)
- No parallel access to spool datasets from different tasks. (READ-SPOOL, SPOOL-FILES)
- Entire Output Management (NOM) does not work due to the restrictions described above.

If your applications need the missing functionality for the JES3 interface or you are using Entire Output Management (NOM), you must not install Entire System Server Version 3.1.1. Instead, you have to use Entire System Server Version 2.2.2, until the missing functionality of the JES3 interface is implemented in the next maintenance level or release of Entire System Server.

New Features

This section describes new Entire System Server Features. It covers the following topics:

- Common New Features
- New Features under OS/390
- New Features under VSE/ESA
- New Features under BS2000/OSD

Common New Features

Dynamic Server Management for Entire System Server

This feature is available under VSE/ESA and BS2000/OSD. It is not needed for OS/390.

Dynamic Server Management allows you to define a range of servers which will be started and stopped according to the workload in the Entire System Server.

For a detailed description of the Dynamic Server Management, see the subsection Dynamic Server Management for Entire System Server in Section Common Entire System Server Features in the Entire System Server Administration Documentation.

There are the following new startup parameters for Dynamic Server Management:

- SERVER-DYN;
- SERVER-MAX;
- SERVER-MIN;
- SERVER-NONACT;
- SERVER-QUEUE-DEPTH.

For more information, see Section Startup Parameters in the Entire System Server Administration Documentation.

Trace of Entire System Server

Entire System Server creates incore trace data on request for diagnostic purposes. An external trace analyzer (ESYTRACE) reads the incore data and converts it to printable format.

For a detailed description of the Trace feature, see the subsection Creating Trace Data in the Entire System Server in Section Common Entire System Server Features in the Entire System Server Administration Documentation.

There are the following new startup parameters for Trace:

- TRACE;
- TRACE-LEN;
- TRACE-SAV.

For more information, see Section Startup Parameters in the Entire System Server Administration Documentation.

Zap Reports in Entire System Server

During startup, Entire System Server reports all applied zaps and additional information about the running load modules.

For a detailed description, see the subsection ZAP Reports in Entire System Server in Section Common Entire System Server Features in the Entire System Server Administration Documentation.

Deferred Shutdown of Entire System Server

Entire System Server must stop all NATURAL-SUB-TASKS before shutting down.

This procedure is described under Deactivating SAT during Entire System Server Stop within the Running System Automation Tools in Entire System Server subsection in Section Common Entire System Server Features.

A new startup parameter has been created therefore to limit the delay:

SHUTDOWN-MAX-DELAY

For more information, see Section Startup Parameters in the Entire System Server Administration Documentation.

Additional Fields Supported in NATPROC-USERS View

The following new fields:

- FULL-SCAN;
- INTERNAL-TASK;
- TASK-ID;
- JOB-ID (on BS2000/OSD only)

have been added to provide information about internal tasks of ESY.

This enhancement completes the information about the activities inside Entire System Server. For more details, see View Description of NATPROC-USERS in the Entire System Server User's Guide.

New Features under OS/390

New and Changed Fields for WRITE-SPOOL

Fields have been added or changed to the view WRITE-SPOOL that may be used by a functional subsystem (FSS) that can perform Internet Protocol (IP) transmission (for example, IP PrintWay). See the documentation for the particular subsystem for additional information.

The DESTINATION field has been expanded to a length of 50 bytes to allow the specification of a TCP/IP address or host name in the form 'IP:ipaddr'.

The FSSDATA field has been added to allow the specification of a subsystem-defined parameter for a functional subsystem.

The PORTNO field has been added to allow the specification of the TCP/IP port number at which a FSS connects to a printer.

The PRTOPTNS field has been added to allow the specification of additional print option data for a functional subsystem.

The PRTQUEUE field has been added to allow the specification of the name of the target print queue on a remote host system.

See the view description of WRITE-SPOOL in the Entire System Server User's Guide for a detailed description of the new and changed fields.

Copying of PDSE Program Objects

Copying of program objects (PDSE load modules) is now supported by COPY-FILE on the local node. Remote copy support will be available in a future release.

New Common JES Interface

The former JES2 and JES3 interfaces have been rewritten and integrated into a Common JES Interface, exploiting the OS/390 MVS subsystem interface functions 79 (SYSOUT API) and 80 (Extended Status). However, for JES3 some restrictions apply (see chapter Restrictions above), that will be lifted with a future release.

The Common JES Interface needs not be assembled during installation and therefore is distributed only as load module. It currently supports all JES2 and JES3 releases from OS/390 V2R6 to V2R10. Support for new releases of JES2 and JES3 will be added via problem solutions.

All required security checks are done within the Common JES Interface and the SYSOUT API implementations using the SAF router interface. Therefore the former security exit JESVRACF is no longer required. However, for compatibility reasons, a dummy exit is provided that may be used to perform additional authorization functions.

With the Common JES Interface, the views ACTIVE-JOBS, SPOOL-QUEUE and SPOOL-FILES may return job queue entries and spool file entries in a different order than with the former JES2 and JES3 interfaces. Also, some error codes related to the former interfaces are no longer used, and some new error codes have been added for the new interface. Please see the corresponding view descriptions in the Entire System Server User's Guide for details on the error codes.

The startup parameter SYSLOG-REFRESH is no longer supported and will be ignored, if specified. Please remove any SYSLOG-REFRESH specifications from your startup parameters to avoid initialization errors with future releases of Entire System Server.

Security Exits Distributed as Load Modules

To simplify installation, all security exits are pre-assembled and also distributed as load modules. If no modifications to these exits are needed to satisfy special customer requirements, they no longer need to be assembled and linked during installation.

New Features under VSE/ESA

Security

User exits for support of the SAF Security Interface (available starting with VSE/ESA 2.4) may now be used. Please contact Software AG support for details.

New Features under BS2000/OSD

Addressing Mode

All tasks of Entire System Server run in AMODE 31. This is independent from settings in the job control. The startup parameter AMODE is not evaluated any more and can be omitted.

Usage of Operating System Interfaces

The views of Entire System Server use macros and SVCs recommended for BS2000/OSD Version 2. Therefore, views were redesigned to benefit from the new interfaces.

No more Data Limitations for CATALOG and VTOC Views

Due to enhancements in operating system interfaces, there is no limitation of retrieved file information any more. The amount of return data is limited only by the available storage for the ESY SERVER address space.

Using Global Access Tables in READ-FILE

READ-FILE maintains access tables for SAM files if the field DIRECT has not been set to YES. These tables contain information about the number of records per block in a file and improve direct access to certain records within a file. These tables have been moved from the user-specific context to the global context in Entire System Server to improve the READ-FILE performance if different users are working with the same file non-sequentially.

The new startup parameter NUMFAT has been added to specify the number of internal access tables. For details, see Section Startup Parameters in the Entire System Server Administration Documentation.

Create an LMS Library via FILE-ALLOCATE

The new FILE-ALLOCATE view supports the creation of LMS libraries. The field PRODUCT has been added therefore. For more details, see the description of the PRODUCT field and the sample FIND statement in View Description of FILE-ALLOCATE in the Entire System Server User's Guide. See also the description of the REPLACE field for restrictions.

Parameter Handling

The parser routine for the ESY parameter file has been redesigned to improve the robustness and fault-tolerance.

Code Optimization

The communication between the different ESY tasks has been redesigned to use the Forward Eventing interfaces of BS2000/OSD to improve the performance.

New Library Concept

The load modules are link-edited to reduce the ESY startup duration. Now there is a strict distinction between the ESY delivery library and the ESY user library to separate user exits from the ESY delivery module library.

For more information, see Library Concept in the subsection Details for Running Entire System Server on BS2000/OSD, Section Administration - BS2000/OSD Considerations.

The required assignments of LINK-NAME DDLIB (MAIN task only) and DDLIB2 (all tasks) will be tested explicitly during startup of the ESY tasks.

Console error message ESY2160 is issued to report a missing LINK-NAME.

SVC Usage Reduction

An internal stack has been implemented to reduce the number of memory requests by using the stack.

Stopping Entire System Server via Program

The module ESYSTOP has been implemented to stop the Entire System Server without using any operator commands but by only running a program. For more details, see Shutdown of Entire System Server on BS2000/OSD in Section BS2000/OSD Considerations of the Entire System Server Administration Documentation.

Additional Fields Supported in FILE-ATTRIBUTES View

Information about

- BACKUP-INFO;
- BACKUP-VERSION-NUMBER;
- MIGRATE;
- STORAGE-LEVEL

will be returned from the view FILE-ATTRIBUTES. For more details, see View Description of FILE-ATTRIBUTES in the Entire System Server User's Guide.

Additional Values for Startup Parameter MSGLEVEL

Value I (INFORMATION) can be specified instead of 1 (same meaning) to improve readability of MSGLEVEL values. For more information, see Section Startup Parameters in the Entire System Server Administration Documentation.

New Startup Parameter NUMUSER

The number of ESY users working in parallel can now be defined in the parameter file. See the parameter NUMUSER in the section Startup Parameters of the Entire System Server Administration Documentation.

New CONSOLE Program

The CONSOLE program delivered with Entire System Server 3.1.1 uses new data structures. New ESYCONS cannot serve nodes running former ESY versions. It uses different serialization items to run old and new ESYCONS in parallel on the same machine. Therefore, you are required to establish another user ID for the new UCON interface task. If no parallel operation of old and new ESY is needed, the existing user ID should be used for the UCON interface.

Changes/Enhancements

This section describes implemented changes and enhancements of Entire System Server.

It covers the following topics:

- Changes / Enhancements on OS/390
- Changes / Enhancements on VSE/ESA
- Changes / Enhancements on BS2000/OSD

Changes / Enhancements on OS/390

C/E Description

C/E	Description
3210	Return code at ESY termination. See Return Codes Issued by Entire System Server at Termination in Installation for OS/390.
5617	Support PDSE in FILE-ATTRIBUTES. See the new field PAGES-USED in View Description of FILE-ATTRIBUTES in the Entire System Server User's Guide. The field PERCENT-USED is also provided for PDSE.
5766	Large record support in READ-SPOOL (SEGMENT's). See the new field SEGMENT-LENGTH in View Description of READ-SPOOL in the Entire System Server User's Guide.
6132	Operator command "START ALL" to restart ESM monitors after shutting down. See Activating/Deactivating NATURAL-SUBTASKS (SAT) during Operation.
8724	New field TAPE-UNLOAD in WRITE-FILE view to unload tapes after CLOSE. For more details, see View Description of WRITE-FILE in the Entire System Server User's Guide.

Changes / Enhancements on VSE/ESA

C/E Description

C/E	Description
3210	Return code at ESY termination. See Return Codes Issued by Entire System Server at Termination in Installation for VSE/ESA.
6132	Operator command "START ALL" to restart ESM monitors after shutting down. See Activating/Deactivating NATURAL-SUBTASKS (SAT) during Operation.

Changes / Enhancements on BS2000/OSD

C/E Description

C/E	Description
3210	Return code at ESY termination. For detailed information, see Program Characteristics in Details for Running Entire System Server on BS2000/OSD.
3313	Support LMS Record Type. New field ELEMENT-RECORD-TYPE is available in READ-FILE and WRITE-FILE view to copy LMS object modules properly. See View Description of READ-FILE and WRITE-FILE in the Entire System Server User's Guide.
6132	Operator command "START ALL" to restart ESM monitors after shutting down. See Activating/Deactivating NATURAL-SUBTASKS (SAT) during Operation.
7751	CONSOLE WAIT in WAIT task only. A request such as "FIND CONSOLE WITH FUNCTION = 'DISPLAY' AND NODE = node AND WAIT-TIME = greater_than_0 AND READ-DIRECTION = 'F' AND RECORD-NUMBER = last_+_1" was performing a VPASS in the SERVER task and thus blocked the request processing of other users. This wait has been moved to the EVENTING wait task to avoid blocking the SERVER. If Eventing is not configured, an error "ESY5809 Subsystem not active" is returned.
7758	NATURAL-SUB-TASK job skeleton as part of ESY startup parameter file. See the subsection Start of SAT under BS2000/OSD in Section Administration - BS2000/OSD Considerations. New startup parameters have been added therefore: <ul style="list-style-type: none"> ● SATSKEL-BEGIN and <ul style="list-style-type: none"> ● SATSKEL-END. For more information, see Section Startup Parameters.
8724	New field TAPE-UNLOAD in WRITE-FILE view to unload tapes after CLOSE. For more details, see View Description of WRITE-FILE in the Entire System Server User's Guide.
8943	Use new CMD macro Version 4 with an increased output buffer size.
9079	Startup parm SPOOL=YES/NO for BS2000/OSD to support environments with temporarily disabled Spooling subsystem. For more information, see Section Startup Parameters.

Solved SAGSIS Problems

This section describes solved SAGSIS problems for Entire System Server.

It covers the following topics

- Solved SAGSIS Problems on OS/390
- Solved SAGSIS Problems on VSE/ESA
- Solved SAGSIS Problems on BS2000/OSD

Solved SAGSIS Problems on OS/390

Problem	Description
188324	CLOG LAYOUT=5 support for NPR.

Solved SAGSIS Problems on VSE/ESA

Problem	Description
172472	Moved dataset causes 4342D.
188324	CLOG LAYOUT=5 support for NPR.
194062	OP77I at XMCSV035 + X' 6DE'.
193365	No line feed during VTAM print.

Solved SAGSIS Problems on BS2000/OSD

Problem	Description
188324	CLOG LAYOUT=5 support for NPR.

Other Problems Solved on BS2000/OSD

A bug fix is implemented to post all other ESY tasks if the MAIN task has abended abnormally. The non-MAIN tasks will also stop immediately.

The NATURAL-SUB-TASK feature is available also if the startup parameter JOB NATSUB is omitted but startup parameter NATNUMSUB has been specified. This allows you to start NATURAL-SUB-TASK at any time.

Users will be cleaned up asynchronously to avoid a temporarily blocked MAIN task. Therefore, the ESY0007 confirmation message will not be issued until the responses of all involved SERVER tasks have been received.

Cancelled Support

Cancelled Support on BS2000/OSD

As already announced with Entire System Server 2.2.2, the support of the LMS Version 1 is cancelled with Entire System Server 3.1.1. The appropriate startup parameter LMSVERS is not needed any more and will be ignored.

XEND and ADAEND commands

In the past, the undocumented XEND command may have been used instead of the ADAEND command to terminate an Entire System Server region. This command should not be used, and it will go away in a future release.

Entire System Server 2.2.2 Release Notes



For further information, you should also read the **Entire System Server 2.2.1 Release Notes** which are delivered with Version 2.2.2 on the current Natural Documentation CD-ROM and in printed form. References contained in the Version 2.2.1 Release Notes generally refer to the corresponding Version 2.2.1 manuals which are included in the Version 2.2.2 documentation set as PDF files only. Formal differences to the current release documentation may exist, for example, Software AG product names (Natural, Adabas, etc.) are written in capital letters.

These Release Notes provide an overview of solved problems provided for Entire System Server 2.2.2.

This document covers the following topics:

- Support of Previous Versions
 - Prerequisites
 - Solved SAGSIS Problems on OS/390
 - Solved SAGSIS Problems on VSE/ESA
 - Solved SAGSIS Problems on BS2000/OSD
-

Support of Previous Versions

With the release of Entire System Server 2.2.2, versions of Entire System Server lower than 2.1.4 can no longer be supported. You are therefore strongly advised to migrate to the current version at your earliest convenience.

Note:

Since Natural 2.3.4, the installation of ESX 2.3.x under Natural Version 2.3.4 is described in the Natural 2.3.4 Release Notes. For new features and change enhancements, please refer to the Entire System Server 2.2.1 Release Notes.

Prerequisites

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

- Adabas Version 6.2 or above;

If you are using Entire System Server Version 222, Adabas Version 711 and Natural Version 312, please apply zap AO711027 in the Adabas load library.

- Natural Version 2.3.4 or above;

There are the following additional prerequisites for SYSPROD running with Entire System Server:

- For NAT234: the fixes NA23425 and NA23439
- For NAT312: the fix NA31206

Apply the fixes as described below:

Step	Procedure
1	Change the text from NPR to ESY in the member NATCONFIG in NAT234.SRCE or NAT312.SRCE.
2	Arrange ESY in alphabetical order.
3	In both cases, the Natural module NATCONFIG has to be reassembled and linked.
4	Load NPR222.INPL.
5	As described in the Natural Installation Manual Step 6, the Natural Nucleus has to be relinked.

- Entire System Server Interface (provided with Natural 2.3.4);
- Entire Net-Work Version 5.4.1 (optional, for multi-CPU support).
- Predict Version 3.2 or above (optional).

The Entire System Server services are available in any Natural environment that runs any or a combination of the following operating systems:

- OS/390 Version 2.4 or above,
- VSE/ESA Version 1.4.4 or above,
- BS2000/OSD Version 2 or above.

Solved SAGSIS Problems on OS/390

Problem	Description
181725	ESY5710 Allocation failed.
182929	Abend on operator command.
183397	Delete PS / alloc PS failed.
184051	COPY book missing on tape.
184149	ESY5710 ALLOC FAILED INVALID UNIT.
184158	Abend S0C2 in XCOMV007 at +2F4.
184189	View CATALOG and XCOMV008.
184285	ESY5508 Adabas Rsp 52.
184287	NAT7545 / ESY5510.
185000	Error ESY5782 message not correct.
185035	Invalid ESD-ADDRESS - load-module.
185046	OS/390 2.7 and 2.8 XCOMJES2.
185050	Change defaults NATWSPL2 NATWSP23.
185368	Abend S0C2 in XCOMDEV4 at +1BA.
185375	Abend S0C2 in XCOMV009 at +39E.
185577	Messages ESY0001I from NATWSPL2.
185583	ESY5631 Console table not found.
185636	ESY5710 Allocation failed message.
185881	Abend S0C4 Abend in XCOMV032.
186023	READ-SPOOL TYPE AL only 1 line.
187558	Abend S0C4 in XCOMJES2+X‡290AŸ
187905	NPR cannot be stopped.
187952	Expiration-date with YYYY/DDD.
188791	Abend S0C4 in XCOMV008+X‡0468Ÿ.
189021	Write-to-Spool for Natural 2.3.
189758	LOG-DATX in CONSOLE-LOG.

Further Solved SAGSIS Problems on OS/390:

Problem	Description
190490	Sometimes Monitor does not start.
190502	NCL terminates with S13E.
190511	S0C4 abend in ESYNMAIN.
190628	ESY5785 w/ MVTOC pgm in SYSNPE.
190650	JES2 Job Numbers > 32767.
190992	datx fields are blank.
191168	SYSPROD USR0050P.
191343	LIB-DIRECTORY - undefined results.
191393	IEC342I CATALOG ABEND.
191517	Several abends A0A-10 JES3.
191562	S0C4 CSECT ACF9CXT SYSTEM-COMMAND.
191643	ABEND S0C4 during startup.
191759	Missing error text.
192060	READ-FILE SCAN-LIMIT not precise.
192534	Abend S047 after SYSTEM-COMMAND.
192576	Start/end date blank.
192677	Assembly NATPAML error ASM044E.
192796	ESY3429 in SYSNPE FILE-ALLOCATE.

Solved SAGSIS Problems on VSE/ESA

Problem	Description
180030	SAT subtask with NAT228.
186436	SUBTASK NOMXTS00 CANCELED.
186783	ESY5508 Adabas Rsp 52.
186784	NAT7545 / ESY5510.
186785	Batch task abends with dump.
188156	NPR dumps after ADAEND.
188158	NPR dumps subtask during ADAEND.
188162	Error in Date Arithmetic 29.2.2000
189422	Storage not freed by NOM subtasks.
189935	Sporadically ESY5631.
189985	LOG-DATX IN CONSOLE-LOG
192138	Member VTAMNATP.B is missing.
192321	SYSTEM-INFO returns wrong date.

Solved SAGSIS Problems on BS2000/OSD

- Other Problems Solved on BS2000/OSD
 - Description
 - Cancelled Support

Problem	Description
178216	NAT23x, dyn. parms for subtask.
182482	Performance problem SPOOL V.4
183474	ESY5889 (DMS0D80) at SATSTART View processor NATURAL-SUBTASK cannot open temporary file on NK4 pubsets. Similar problems in view processors SUBMIT and WRITE-SPOOL solved.
183593	MAIN Task Dump after WTO NPR0064 in SERVER.
183678	NATPROC-LOGON gets Adabas response code 52.
183717	ESY0400E ENASI RC 0x10000004 if ESYCONS is executed with PROG- MOD=ANY
183807	SYSTEM-INFO gets response code 5510.
185893	Generated /EOF card in view processor NATURAL-SUBTASK.
185911	ESY0300E (IW48 in XCOMV035) after ADAEND.
185918	Entire System Server does not start with Adabas V.7.
188555	Performance problem SPOOL V4.

Other Problems Solved on BS2000/OSD

Description

- Upper limit of Natural subtasks increased from 20 to 100.
- Execute NPRINIT in MAIN task with PROG-MOD=ANY.
- Deferred ESY ADAEND processing to properly execute shutdown of internal products.
- Support different configurations of Natural batch driver to read dynamic parameters for Natural subtasking. The new startup parameter NATDYNPAR has been introduced to specify the input unit of dynamic parameters and a revised edition of the Natural subtask job skeletons is provided.
- Since Entire System Server supports BS2000/OSD V.2 and above, a console message will be issued if an earlier operating system version has been detected. Please note that the next release of ESY will require BS2000/OSD Version 2 and cannot run with older operating system versions.

The following message appears as warning:

XCO0091W BS2000/OSD V.2 or above is recommended.

Cancelled Support

Support of LMS Version 1 will be canceled with the next version of Entire System Server.

Entire System Server 2.2.1 Release Notes



The Release Notes of the **Entire System Server Version 2.2.1** are provided for background information only!
References contained in the Version 2.2.1 Release Notes generally refer to the corresponding Version 2.2.1 manuals which are not included in the Version 2.2.2 documentation set.

These Release Notes provide an overview of the changes and enhancements offered by Entire System Server Version 2.2.1.

Together with this release, Entire System Server Interface (ESX) Version 2.3.1 is provided for all operating systems, which you must also install. For Natural Versions 2.3.4 and above (except Version 3.1.1) the ESX modules are part of the Natural nucleus and do not have to be linked to it any longer. For Natural Version 3.1.1 see the section Installation Guidelines for ESX 2.3.1 under Natural 3.1.1 or below Version 2.3.4.

This document covers the following topics:

- Support of Previous Versions
- Prerequisites
- New Features
- OS/390 Operating System
- BS2000/OSD Operating System
- Installation Guidelines for ESX 2.3.1
- Changes / Enhancements
- Solved SAGSIS Problems

Support of Previous Versions

Note that with the release of Entire System Server 2.2.1, versions of Entire System Server lower than 2.1.4 can no longer be supported. You are therefore strongly advised to migrate to the current version at your earliest convenience.

Prerequisites

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

- Natural Version 2.2.8 or above
- Adabas Version 6.2 or above
- Entire System Server Interface 2.3.1 (provided with the Entire System Server and installed as part of the installation described below)
- Entire Net-Work Version 5.4.1 (optional, for multi-CPU support)
- Predict Version 3.2 or above (optional)

The Entire System Server services are available in any Natural environment that runs any or a combination of the following operating systems:

- OS/390 Version 2.4 or above,
- VSE/ESA Version 1.4.4 or above,
- BS2000/OSD Version 2 or above.

New Features

With Entire System Server 2.2.1, new fields were added to the following views:

- FILE-ATTRIBUTES
- LIB-DIRECTORY
- SYSTEM-INFO
- NATPROC-LOGON
- WRITE-SPOOL
- WRITE-FILE

FILE-ATTRIBUTES

- SERIES-ARRAY
- VOLSER-ARRAY
- BLOCK-CONTROL
- FILE-SEQUENCE-NUMBER

LIB-DIRECTORY

- DATX-CREATED
- DATX-CHANGED

SYSTEM-INFO

- SPOOL-RELEASE
- SPOOL-TYPE
- NODE-NAME-LIST
- RSO-VERSION

NATPROC-LOGON

- ACCOUNTING

WRITE-SPOOL

- HOLD

WRITE-FILE

- EXPIRATION-DATE
- EXPIRATION-DATX

OS/390 Operating System

Installation Guidelines for ESX 2.3.x under Natural Version 2.3.x

The write-spool-feature discussed in the Entire System Server 2.1.1 installation and customization manual for Natural Version 2.3.x (OS/390) is now available.

The new module NATWSP23 has to be linked with the NAT23 nucleus. The definition in the Natural parameter should be as follows:

NTPRINT (print-file-numbers), AM=NAF, NAFSIZE=1

BS2000/OSD Operating System

- ZAP XC22101 for Natural 2.3 and above
- Library Management System

ZAP XC22101 for Natural 2.3 and above

As of OSD Version 3.x, the RDCARD macro (SYSIPT) has been dropped by Siemens.

For proper subtasking under Entire System Management products (Entire Output Management and Entire Operations), parameters are passed dynamically up to a length of 250 characters.

This zap extends the maximum characters passing from 72 to 255 to satisfy the Entire Operations needs at startup time of the Natural subtasks.

This zap must be applied if:

- Natural Version 2.3 and OSD Version 3.x are used as basis for Entire Output Management or Entire Operations

It must **not** be applied if:

- Natural below Version 2.3 is used
- DYNPAR is not equal to SYSDATA in your NAMBS2 macro definition.

If the zap is applied and subtasking is active, then please use JCL frames P.NSBTSKIS.OSD3 or P.NSBTSKSD.OSD3 to assemble the subtask job as an example. These frames omit the SYSIPT definitions.

Library Management System

With Entire System Server 2.2.1, the BS2000/OSD Library Management System (LMS) Version 1 is fully functional. Please note that it will no longer be supported with the next version of Entire System Server.

Installation Guidelines for ESX 2.3.1

ESX Version 2.3.1 supports Natural 2.2.x and Natural 2.3.x. For details see the Entire System Server Installation Manual, Step Relink Natural.

From Natural Version 2.3.4, on, the ESX modules will be distributed together with Natural.

The following section is an example for OS/390:

Relink Natural

If you are using Natural Version 2.3.4 or Natural Versions 3.1.2 and above, do not perform this step.

Under Natural 2.3, it would be possible to link all the required individual modules into the Natural nucleus, but it is better to link two composite modules (NATGWIDB and NATGWPRC - these names are fixed because of Natural requirements) which then can be integrated into Natural in any one of the four supported ways:

- linked with the shared nucleus,
- linked with dependent nucleus,
- linked with alternate parm module,
- loaded dynamically via RCA.

The linkage editor control cards for Entire System Server are:

```
MODE AMODE (31)
MODE RMODE (ANY)
INCLUDE ESXLIB(ESXGWPRC)
INCLUDE ESXLIB(ESXPNIYS)
INCLUDE ESXLIB(ESXPRCSY)
INCLUDE SMALIB(ESXPNIIP)
INCLUDE SMALIB(ESYNODTB) (not mandatory)
INCLUDE ESXLIB(ESXGWIDB) (for Natural ISPF only)
INCLUDE ESXLIB(ESXROUT) (for Natural ISPF only)
INCLUDE SMALIB(ESXREDS) (for Natural ISPF only)
INCLUDE SMALIB(ESXPNIID)
INCLUDE SMALIB(ESXPRCID)
```

For Natural Version 2.2, the modules must be linked with the Natural nucleus (if the nucleus is split, they may be contained in the shared part) for Entire System Server:

```
INCLUDE ESXLIB(ESXGWPRC)
INCLUDE ESXLIB(CMPROCX)
INCLUDE ESXLIB(NATPNI)
INCLUDE SMALIB(ESXPNIIP)
INCLUDE SMALIB(ESYNODTB) (not mandatory)
INCLUDE ESXLIB(ESXGWIDB) (for Natural ISPF only)
INCLUDE ESXLIB(ESXROUT) (for Natural ISPF only)
INCLUDE SMALIB(ESXREDS) (for Natural ISPF only)
```

Changes / Enhancements

C/E	Description
7759	Allow shutdown of subproducts. Allow shutdown of a running Entire System Server including shutdown of its subproducts, e.g. Entire Operations, Entire Output Management and Entire System Server (on all operating systems). An internal command SHUTDOWN is sent to all related subproducts.
7752	Use cross-memory communication Get rid of IBM JES2 parameter APPLCOPY=common. Use cross-memory communication instead (OS/390 only).
7781	Date format System-Info displays if European or American date format is used (VSE only).
6580	Increase maximum number of extents VTOC maximum number of extents is now 123 (OS/390 only).
6224	Refresh Standard Label Area Refresh standard label area using an operator command or a nat-pgm (VSE only).
4960	Cyrillic characters Console view allows cyrillic characters (OS/360 and VSE only).
3255	Show flags of modules View LIB-DIRECTORY in VSE shows attributes e.g. AMODE, RMODE, MSHP.
2890	Show alias View LIB-DIRECTORY for load modules shows if a member name is somebody elses alias (OS/390 only).
2709	HSM. Delete HSM migrated datasets without recalling them (OS/390 only). CATALOG view The OS/390 CATALOG view has been redesigned. It now uses the catalog OS/390 search interface and allows faster access. BS2000/OSD non-ISAM files Access to BS2000/OSD non-ISAM files has been redesigned. If a record is read randomly, access is much faster now.
7723	New parameter for sysplex console Two new parameters (OS/390 and VSE only) were introduced: SYSTEMCONS=DAEF,DA2F: shows both the console of DAEF and of DA2F;CONSNAME=WOLFGANG: assign a console named Wolfgang.
	New commands for OS/390 and VSE environments REFRESH JES (OS/390 and VSE): refreshes the internal table related to spool processing REFRESH LABELS (VSE only): refreshes the internal table. This is allowed only if FILETABLE=DYNAMIC was specified in the startup parameters.

Solved SAGSIS Problems

Problem	Description
138749	Print to VTAM very slow
146578	Cannot find numeric datasets 148001 Process libraries only
148142	Date wrong in Natural subtask
148333	VSAM (SHOWCAT) processing error
148363	Library members have zero records
153757	Submit with password-encryption
155510	ESY5871 copying from OS/390 to VSE
159106	Catalog view - last line copied
160352	Access VSE library
162629	READ-FILE LMS-element handling of record types
165235	PROCESS SUBMIT USERID= 'TSOS'
166180	List-File Panel with SHARE=NO
166268	ESY abends 0C4 at XDBPROC+196C
168246	record length in power listings
169526	ESY5993 at create BS2000/OSD files
170473	FILE-ALLOCATE error RC 035C0022
172472	Moved dataset causes 4342D
175167	ESY5777 browse console log
175704	Nat Abend on READ-FILE EOF
175728	Entire System Server Natural Subtasking under BS2000/OSD3
175858	ESY5530 with fsharing=1
175941	NAT23x, dyn. parameters for subtask
176756	Manual NPR211-020ALL, page 341
176879	Write-to-Spool for Natural 2.3
177913	Node Table not efficient
178160	ESY0963 DMS 0D96 on tape