

Entire System Server 3.2.1 Release Notes

These Release Notes provide an overview about all changes for Entire System Server 3.2.1.

This document covers the following topics:

- Support of Previous Versions
 - Prerequisites
 - New Features
 - Changes / Enhancements
 - Solved SAGSIS Problems
 - Migration Checklists
 - Discontinued Support
 - Changes with the Next Version
-

Support of Previous Versions

With the release of Entire System Server 3.2.1, versions of Entire System Server lower than 3.1.1 can no longer be supported. You are therefore strongly advised to migrate to the current version at your earliest convenience.

Due to the restrictions of the Common JES Interface in Entire System Server Version 3.1 regarding JES3, Entire System Server Version 2.2.2 and its JES3 Interface will be supported for z/OS and OS/390 JES3 installations until December 31, 2003.

Prerequisites

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

- Natural Version 3.1.6 or above;
- Adabas Version 7.1.2 with zaps AI712015 and AI712047, Version 7.1.3 with zaps AI713016 and AD713023, or above;
- Entire System Server Interface (provided with Natural);
- Entire Net-Work Version 5.8.1 (optional, for multi-CPU Support);
- Natural ISPF Version 2.4.3 or above (optional)
- Predict Version 4.2.1 or above (optional).

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

- OS/390 Version 2.9 or above; or z/OS Version 1.1 or above
- VSE/ESA Version 2.5 or above;
- BS2000/OSD Version 2 or above.

Notes:

- OS/390 or z/OS: the relevant PTF for APAR OW56783 must be applied.
- OS/390 or z/OS, JES2: the PTFs for APARs OW44349, OW52411, OW55671, OW55856, OW57486, OA03125 and OA03546 must be applied.
- OS/390 or z/OS, JES3: the PTFs for APARs OW34753, OW36022, OW49881, OW50990, OW56608, OW57110, OA01553, OA01715, OA02735, OA03934 and OA04380 must be applied. See also Information APAR III1784 for recommended JES3 SAPI maintenance.

- **BS2000/OSD:** since Entire System Server on BS2000/OSD uses operating system interfaces introduced with BS2000/OSD Version 2, it cannot run on earlier 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.

New Features

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

- Common New Features
- New Features for z/OS and OS/390
- New Features for VSE/ESA
- New Features for BS2000/OSD

Common New Features

- Support of 2-byte DBIDs
- E-mail support
- New, changed and deleted fields

Support of 2-byte DBIDs

Entire System Server Version 3.2.1 supports 2-byte node numbers (DBIDs), thus extending the possible range from 255 up to 65,535. To facilitate this innovation, the following field definitions have been changed from N3 to N5:

- NODE field of all view DDMs
- FROM-NODE and TO-NODE fields in view COPY-FILE
- FROM-NODE field in view SUBMIT

Natural programs will not need to be re-stowed if the Entire System Server node is less than 256, however they will need to be re-stowed (and possibly modified) to access node numbers greater than 255.

The Entire System Server Default DBID specified in the Natural NTDB PROCESS macro statement and used in the view DDMs must still be in the range between 1 and 254.

NAT mainframe version 3.1.6 or Windows and UNIX version 5.1.1 is required to take advantage of an Entire System Server node with a 2-byte DBID. However, not all Software AG products using Entire System Server currently support node numbers greater than 255.

E-mail support

The new Entire System Server version provides support for sending e-mail. A new view processor and the new SEND-EMAIL DDM are provided. For details of using the new DDM, refer to the Entire System Server User's Guide. All administrative requirements for enabling e-mail support are described in Entire System Server Administration Documentation.

Under VSE/ESA, e-mail support has been tested with Connectivity Systems, Inc's and IBM's TCP/IP stack products.

**Warning:**

Under VSE/ESA, if you have an ADA71x (713 or earlier) library in the LIBDEF PHASE statement for Entire System Server, there is an error in the library that must be corrected. An invalid CEEBXITA (both .OBJ and .PHASE) module was accidentally included as part of the distribution. Although this does not affect ADABAS operation, it does cause an addressing exception when using the e-mail support. You must delete these modules from the library. For more information, contact Software AG support.

New, changed and deleted fields

Apart from the NODE fields, the fields listed in the table below have been added, changed or deleted. See the associated view descriptions in the User's Guide for details regarding the affected fields.

In addition, JOB-ID and JOB-NUMBER fields have been changed to support 7-digit job numbers in z/OS. See the section New Features for z/OS and OS/390 for a description of these changes.

View	Field	Change
ACTIVE-JOBS	JES-INIT-ID	A2 -> A4
	QUIESCE	New, A3
	RESOURCE-GROUP	New, A8
	SERVER	New, A3
	SERVICE-CLASS	New, A8
	SERVICE-CLASS-PERIOD	New, N3
	WORKLOAD	New, A8
CATALOG-UPDATE	ALIAS	Deleted
	CVOL	Deleted
	DELETE	Deleted
	EMPTY	Deleted
	INDEX	Deleted
	NUMBER-OF-GENERATIONS	Deleted
COPY-FILE	ALIAS	Deleted
	ERROR-NODE	New, N5
	ERROR-VIEW	New, N3
JOB-VARIABLES	DATA-APPENDIX	New, A3
LIB-DIRECTORY	LONG-ALIAS	New, A3
	MEMBER-TTR	B4 -> B3
	MODULE-ATTRIBUTES	A80 -> A253
	MEMBER-LONG-NAME	New, A253 (see also LONG-ALIAS above)

LOAD-MODULE	MODULE-LENGTH	N7.0->N11.0
	MODULE-ATTRIBUTES	A80->A253
	BLOCK-TTR	Obsolete (see below)
	ESD-NAME-LONG	New, A253
	IN-CSECT-LONG	New, A253
	IDR-CALLERID	New, A80
NATPROC-USERS	NATPROC-ID	A4 -> A10
SPOOL-FILES	NEW-FORM	New, A8
	NEW-WRITER	New, A8
	OUTDISP	New, A6
SPOOL-QUEUE	RECORD-COUNT	N7 -> N9
	REAL-RECORD-COUNT	N7 -> N9
SPOOL-UPDATE	JES3-CLASS	New, A1
	JES3-QUEUE	New, A4
SYSTEM-INFO	PRODUCT-NAME	New, A8
	PRODUCT-VERSION	New, A8
	STARTUP-PARM	Now a descriptor
WRITE-FILE	OPTIONS	Renamed to PRODUCT-OPTIONS
	EXPIRATION-DATE/X	Valid for BS2000/OSD only
WRITE-SPOOL	DESTINATION	A50 -> A127
	FSSDATA	A8 -> A127
	PORTNO	A17 -> N5
	PRTOPTNS	A17 -> A16

New Features for z/OS and OS/390

- Support for 7-digit job numbers
- Replacement of ADALNA5
- CONSOLE FUNCTION='DIS-WTOR': Display pending operator replies
- COPY-FILE PDSE: Program object copy between nodes
- LIB-DIRECTORY: Support of long alias names for PDSEs
- LIB-DIRECTORY: Removal of undocumented behavior
- LOAD-MODULE changes
- New operator command EVENTS

Support for 7-digit job numbers

In z/OS release 1.2, the format of the JES JOBID has changed to support job numbers greater than 99,999. For details, see "z/OS V1R2 JES2 Migration, Chapter 3.1.3: Support for a Maximum of 999,999 Job Numbers", and "z/OS V1R2 JES3 Migration, Chapter 3.1.4: Support for 999,999 job numbers" in IBM's z/OS Library.

To support these higher job numbers, JOB-ID fields have been changed from A5 to A8, and JOB-NUMBER fields have been changed from N5 to N7 (see table of affected views below). Even DDMs and fields not related to OS/390 and z/OS containing JOB-NUMBER or JOB-ID have been modified to consistently support the new formats.

View	Field	Change
ACTIVE-JOBS	JOB-ID	A5 -> A8
	JOB-NUMBER	N5 -> N7
CONSOLE	JOB-ID	A5 -> A8
CONSOLE-LOG	LOG-JOB-NUMBER	N5 -> N7
NATPROC-USERS	JOB-ID ¹	A5 -> A8
READ-SPOOL	JOB-ID	A5 -> A8
	JOB-NUMBER	N5 -> N7
SPOOL-FILES	JOB-ID ¹	A5 -> A8
	JOB-NUMBER	N5 -> N7
	ORIGINATOR-JOB-ID ¹	A5 -> A8
SPOOL-QUEUE	JOB-ID	A5 -> A8
	JOB-NUMBER	N5 -> N7
	ORIGINATOR-JOB-ID ¹	A5 -> A8
SPOOL-UPDATE	JOB-ID	A5 -> A8
	JOB-NUMBER	N5 -> N7
SUBMIT	JOB-ID	A5 -> A8
	JOB-NUMBER	N5 -> N7
TASK-INFO	JOB-ID ¹	A5 -> A8
	JOB-NUMBER ¹	N5 -> N7
	ORIGINATOR-JOB-ID ¹	A5 -> A8
WRITE-SPOOL	JOB-ID	A5 -> A8
	JOB-NUMBER	N5 -> N7

¹ These fields have been changed for the reason of consistency and are not related to z/OS and OS/390.

With previous releases of Entire System Server, the JOB-ID field used to contain the five rightmost bytes of the eight-byte JES JOBID (representing the job number in character format). As of Entire System Server 3.2.1 the JOB-ID field contains the complete JES JOBID (three letters followed by five digits or one letter followed by seven digits).

To achieve the best possible compatibility for five-digit job numbers with previous releases of Entire System Server, the JOB-ID fields for z/OS and OS/390 are handled right-justified. In this way, a five-byte JOB-ID field from a back-level DDM will continue to receive the five rightmost bytes of the JES JOBID.

Only the numeric part of the JOB-ID field will be used for selection purposes. This ensures that a FIND statement with JOB-ID = '23456' will not return a JOB-ID of 'J0123456'. On the other hand, a started task with a JOB-ID value of 'S0123456' will be selected for a FIND statement with JOB-ID = 'J0123456' specified.

Replacement of ADALNA5

Entire System Server no longer requires use of the special ADABAS link module ADALNA5. Entire System Server now uses the standard reentrant ADABAS link module ADALNKR.

CONSOLE FUNCTION='DIS-WTOR': Display pending operator replies

To obtain pending operator reply messages (WTORs) that have been issued before the start of Entire System Server, the operator command 'D R,R,T,SYS=sysid' is issued during initialization.

COPY-FILE PDSE: Program object copy between modes

COPY-FILE now supports copying of PDSE program objects between nodes. Mixed PDS/PDSE copies are still prohibited due to IBM restrictions; an intermediate IEBCOPY of the member to the proper format data set is required.

LIB-DIRECTORY: Support of long alias names for PDSEs

Upon request, LIB-DIRECTORY now returns the first 253 bytes of a long alias name in a PDSE.

LIB-DIRECTORY: Removal of undocumented behavior

There was an undocumented feature under OS/390 and z/OS where the LIB-DIRECTORY field MEMBER-TYPE would contain the value "ALIAS" if the member was an alias. This conflicts with internal COPY-FILE view processing, and also has never been documented; therefore this feature has been removed from Entire System Server with this release. The ALIAS field continues to contain "YES" if the member is an alias - this functionality remains unchanged.

LOAD-MODULE Changes

- Removal of support for field BLOCK-TTR
- Changes in \$PRIVATE entries
- Differences in order/content of output
- SEGMENT-LENGTH behavior

Removal of support for field BLOCK-TTR

Due to improvements in the internal processing in the LOAD-MODULE view, it has become necessary to remove support for the BLOCK-TTR field. This field will contain binary zeros with this release, and it will be removed in the next release.

Changes in \$PRIVATE entries

Also due to these improvements, ESD entries formerly identified as \$PRIVATE will now be identified as \$Pxxxxxx, where xxxxxx is a hexadecimal representation of a binder-internally-generated identifier. (These will be equivalent to "\$PRIVxxxxxx" entries in corresponding AMBLIST output.)

Differences in order/content of output

In addition, IDR records may appear in a slightly different order, and multiple records may be merged into a single record. There may also be slight differences in the return order of ESD entries.

TEXT entries are unchanged.

SEGMENT-LENGTH behavior

For further information, see new additional documentation regarding the value of SEGMENT-LENGTH and large occurrences of the BIND-specified FILL character in the User's Guide.

New operator command EVENTS

A new operator command, EVENTS, has been provided to allow diagnosis of problems with EVENTING tasks.

New Features for VSE/ESA

- Use of 31-bit storage
- Support of VSE/ESA POWER CRE queue
- Support of VSE/ESA POWER multiple browsing of spool files
- Support of XEQ-START/STOP fields in SPOOL-QUEUE
- IDCAMS view now available for VSE/ESA
- Retrieval of contents from VSAM catalogs
- Use of dataspace in a CA-Dynam/D environment
- Enhancements to label processing
- CONSOLE-LOG field PARTITION now a descriptor
- Support of various LOG-xxx fields in CONSOLE-LOG, deprecation of undocumented fields DATX and TIMX
- New operator command EVENTS
- LIB-DIRECTORY enhancements

Use of 31-bit storage

Internal improvements have increased the amount of 31-bit storage used by Entire System Server. We now recommend running NPR in a partition or class with a size greater than 16M. In addition, see the section below regarding dataspace usage in a CA-Dynam/D environment.

Support of VSE/ESA POWER CRE queue

Entire System Server fully supports browsing of POWER spool files in the CRE queue by SPOOL-FILES and READ-SPOOL. A new SPOOL-FILES STATUS value, 'CRE', has been added.

Support of VSE/ESA POWER multiple browsing of spool files

Entire System Server fully supports multiple browsing of POWER spool files without changes to existing NATURAL programs.

Support of XEQ-START/STOP fields in SPOOL-QUEUE

The various fields referencing execution start and stop times are now valid for VSE/ESA. They reflect information about the POWER queue entry rather than the job.

IDCAMS view now available for VSE/ESA

The VSAM utility IDCAMS is now available to NATURAL programs by way of the IDCAMS view.

Retrieval of contents from VSAM catalogs

The CATALOG view now supports retrieval of information from the VSAM master catalog and VSAM user catalogs.

Use of dataspaces in a CA-Dynam/D environment

To reduce VTOC resource conflicts, the VTOC view processor now utilizes dataspaces when Entire System Server runs in an environment where CA-Dynam/D is active. For more details, see Step 13: Dataspace Requirements in the Installation for VSE/ESA section of the Installation and Customization Documentation.

Enhancements to label processing

Improvements have been made in the internal label processing table management that should improve performance when accessing files.

CONSOLE-LOG field PARTITION now a descriptor

The field PARTITION is now a descriptor, which allows it to be used in the WITH clause of the FIND statement.

Support of various LOG-xxx fields in CONSOLE-LOG, deprecation of undocumented fields DATX and TIMX

Several of the LOG-xxx fields that were formerly documented as being OS/390-only have now been added to the VSE/ESA support. This includes LOG-TIMX and LOG-DATX, which replace the undocumented fields DATX and TIMX. The CONSOLE-LOG DDM has been updated so that the fields DATX and TIMX now point to the same short DB names as their LOG-xxx counterparts. These two fields are scheduled to be deleted in a future release of Entire System Server.

Important:

If you have a program that uses either DATX or TIMX, you must recatalog the programs due to the DDM changes before using NPR321, and you should also change the programs to use the LOG-DATX and LOG-TIMX fields.

New operator command EVENTS

A new operator command, EVENTS, has been provided to allow diagnosis of problems with EVENTING tasks.

LIB-DIRECTORY enhancements

The fields BLOCK-COUNT and DATE/DATX/TIME-CREATED are now supported if LIST-SUBLIBS = 'YES'.

New Features for BS2000/OS

All executable components of Entire System Server in BS2000/OSD are built as LLM objects (LMS type L). This reduces the load time significantly.

The new operator command FILES is supported to display all open files per server task (ESYSERV). For further information see FILES in the Operator Commands section of the Administration Documentation.

Changes / Enhancements

The following C/E's have been implemented:

- CE 4049: More NEW fields in SPOOL-FILES
- CE 9965: Provide ALIAS creation for PDSE load modules

Solved SAGSIS Problems

This section describes solved SAGSIS problems for Entire System Server. SAGSIS is the internal Software AG Support Information System, where we track problem issues.

It covers the following topics:

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

Solved SAGSIS Problems on OS/390

Problem	Short Description
177840	re-reading temp files
191009	Output datasets of running jobs
217384	SOC4 REFRESH JES Command
217416	ESY5787 CSI ... Reason 8, RC 64
217791	View CONSOLE field JOB-TYPE
218067	Spool Files with OUTDISP=PURGE
218125	SOC4 in NATPVTPR offset 49E
218315	ASMA034E OPRVRACF assembly error
218544	ESY5551 copying PDSE member
218758	Operator enters ADAEND dump A03
218779	ADAEND is not possible
218858	Abend S30A-18 in XCOMV200+X'5CA'
219499	esy5803 with allocations
219723	Spool ds not found for held job
219851	Device-names: address not found
220020	NATPROC-LOGON without USER-ID
220224	ICH409I 582-000 ABEND RACHECK
220419	SOC7 in XCOMV044 at x'2A30'
220421	JES2 spool utilization incorrect
220715	copy-file write-file VB PDS fails
220895	ESY5900 Cannot allocate SYSOUT
220902	ESY5722 error using READ-SPOOL
221058	Reading multi-volume datasets
221245	SOC1 in XCOMV003 +95C
221609	TIME-XEQ-START value wrong

221949	S80A reason 10
221957	READ-SPOOL TYPE=AL does not work
222191	read-file, multi-volume, volser
222336	ESY5902 reading dataset/member
222689	SPOOL-Q:CLASS not filled f.input
222848	FILE ATTRIBUTES for migrated ds
222887	record-number and read-spool view
223022	Hang using REMOTE callers
223128	Recall should show volser
223454	Zero AREA is filled with blanks
223642	ABEND 5777 READ-FILE
223691	S0C4 in NATPREP+0x382
223774	Support for JES2 z/OS 1.4
223831	FIND SPOOL-QUEUE WITH 'OR' INCORR
224040	Print with NPR-Exit NATWSP23
224300	SPOOL RELEASE with CLASS
225152	Npr311 Abends S0c4 with ADAM99.
225524	line limit reached
225894	SPOOL-FILES CPU consumption
226469	ESY5904 SCLM protection
226869	User can't release his own job
227280	S0c4 at start natprep + x'1e6'
227584	IEA705I GETMAIN 878-10
227600	RACF error browsing own job
227979	S0C1 in XCOMJESC W. SPOOL-QUEUE
228423	ESY5833 trying to change class
228483	NAT3254 with NAT subtasks
229336	Perform. degradation at PO SCAN
229991	ABEND SA0A RC=0010
230147	S0C1 at address X'00000052'
230524	S0C4 in LIBRVS of LIBRARIAN
231067	Find catalog GDG doesn't work
231348	Copy of PDS datasets fails
231527	SPOOL-FILES AND DATA-SET-KEY
232553	ADAEND doesn't work
233602	CONSOLE: TIMX - wrong year 19xx

234049	Read VSAM always No Records.
234299	ESY5899 on READ-FILE multi VOLUME
234596	ABEND CODE 8423E000
235014	Real size of trace storage ?
236854	ABEND S0C7 in XCOMV002
236905	ESY5777 during a 3GL-PAC-Migration

Other Problems Solved on z/OS

The restrictions for OS/390 JES3 installations as described in the Entire System Server Version 3.1.1 Release Notes no longer apply. The Common JES Interface now returns spool information from JES3 in the same way as from JES2, which is slightly different from the way spool information was returned from the JES3 interface of NPR22. To ease migration in a JES3 environment, the spool-related view processors will support either a 'compatibility mode' or a 'consistency mode'. The mode is determined from the value specified for the SPOOL startup parameter. SPOOL=JES3 sets the 'compatibility mode'; the 'consistency mode' can be requested with SPOOL=JESC. For details, see z/OS and OS/390 JES3 Considerations in the section OS/390 Considerations of the Administration Documentation. We plan to remove support for the 'compatibility mode' in a future release.

Solved SAGSIS Problems on VSE/ESA

Problem	Short Description
200121	ESY5996 DYNAMPOOL=poolname
213413	LIB-DIRECTORY ends prematurely
215309	Various abends with CA-Dynam/D
218604	ESY5551 copying PDSE member
220460	ESY5996 browse VSE-members
221018	Browse VSE File under DYNAM fails
221080	BROWSE SAM ESDS VSAM files
221752	Reduce size of POWER ERROR-TEXT
224060	ADAM98 error (no common memory)
226468	ESY5904 SCLM protection
228483	NAT3254 with NAT subtasks
229656	Support POWER 6.7
231461	Possible FREEVIS errors
231701	Cancel code 25 if MSGLEVEL=2
232716	CONSOLE: TIMX - wrong year 19xx
232720	CONSOLE-LOG wrong LOG-TIMX
234446	ESY5701 in READ-FILE execution
235417	Real size of trace storage ?

Solved SAGSIS Problems on BS2000/OSD

Problem	Short Description
227660	Communication lost
227736	NPR31x does not start with ADA731

Migration Checklists

- z/OS and OS/390
- VSE/ESA
- BS2000/OSD

z/OS and OS/390

- Startup Parameters
- JCL Procedure
- RACF Definitions

Startup Parameters:

- Remove retired parameters MIGRAID and SYSLOG-REFRESH, if still specified.
- If you intend to use the new e-mail feature:
 - add SMTP-HOST, TCP-STACK and, optionally SMTP-PORT parameters. For further information, see Run E-Mail Client in the section Common Entire System Server Features of the Administration Documentation.
- If you are using JES3 and you want to exploit the 'consistency mode':
 - change your SPOOL parameter value from 'JES3' to 'JESC'. For further information, see z/OS and OS/390 JES3 Considerations in the section OS/390 Considerations of the Administration Documentation.
- Check for IUBL= settings and remove it. The default value is now 32767, and a smaller value may cause problems with the remote PDSE copy function of COPY-FILE

JCL Procedure:

- If you intend to use the new e-mail feature:
 - you may have to add a SYSTCPD DD statement to your JCL procedure. For further information, see Run E-Mail Client in the section Common Entire System Server Features of the Administration Documentation.
- If you are using JES3, and you are migrating from NPR222:
 - remove the UQJ3JOBS DD statement for the DSP data set.
- When the DSP data set is no longer needed by any back-level Entire System Server or Complete address space, you should:
 - cancel the UQJ3 DSP in JES3;
 - RESTORE and REJECT the USERMOD to add the DSP directory entry to IATGRPT;
 - delete the DSP load module IATUQJ3 from your load library;
 - remove the allocation for the DSP data set from your JES3 JCL procedure or initialization statement deck, and
 - delete the DSP data set.

For further information, see z/OS and OS/390 JES3 Considerations in the section OS/390 Considerations of the Administration Documentation.

RACF Definitions:

- Add READ authority for the MVS.DISPLAY.R profile in the OPERCMDS resource class to your Entire System Server's MCS console, if not already defined.
- If you intend to use the new e-mail feature:
 - define the Entire System Server Started Task and all users requesting SEND-EMAIL as UNIX System Services users (define an OMVS segment in RACF). For further information, see Run E-Mail Client in the section Common Entire System Server Features of the Administration Documentation.

VSE/ESA

- Startup Parameters
- Partition/Class Size
- Dataspaces
- CONSOLE-LOG

Startup Parameters

- If you intend to use the new e-mail feature, add SMTP-HOST, TCP-STACK and, optionally SMTP-PORT parameters. For further information, see Run E-Mail Client in the section Common Entire System Server Features of the Administration Documentation. See also Warning regarding CEEBXITA in older ADABAS libraries.

Partition/Class Size

- Due to changes in internal processing, we recommend increasing the size of the partition or class to a value greater than 16M.

Dataspaces

- If you are using CA-Dynam/D, see Step 13: Dataspace Requirements in the Installation for VSE/ESA section of the Installation and Customization Documentation.

CONSOLE-LOG

- Check programs for use of deprecated fields DATX and LOGX.

BS2000/OSD

- Startup Parameters

Startup Parameters

- If you intend to use the new e-mail feature, add SMTP-HOST, TCP-STACK and, optionally SMTP-PORT parameters. For further information, see Run E-Mail Client in the section Common Entire System Server Features of the Administration Documentation.

Discontinued Support

As announced in the Entire System Server 3.1.2 Release Notes:

- support for files 100 and 202 (sequential file support using a DDM to describe the data) has been removed;
- fields and functions related to CVOLs have been removed from the DDM for CATALOG-UPDATE. IBM has dropped support for CVOLs as of January 1st, 2000.

Changes with the Next Version

The field BLOCK-TTR (obsolete as of this release) will be removed from the view LOAD-MODULE.

We plan to implement support for multi-level security in a future version of Entire System Server. This may require changes to customized versions of the current security exits. If you are using non-standard resource classes in your security exits, please communicate your requirements to Software AG Customer Support.