

# Natural 3.1.5 Release Notes - General Information

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## Introduction

These Release Notes inform you of the enhancements provided with Version 3.1.5 of Natural.

Natural 3.1.5 contains all ZAPs, INPL updates, early warnings and source changes applied to Natural 3.1.4 as error corrections.

## Prerequisites

### Operating/Teleprocessing Systems Required

Natural Version 3.1 requires the following versions of the following operating/teleprocessing systems:

Product	Version
BS2000/OSD	2, 3 or 4
OS/390	2.6, 2.7, 2.8, 2.9 or 2.10  Natural for VSAM Version 3.1.5 requires that the corresponding DFSMS Version is installed, minimum requirement is DFSMS Version 1.5.
z/OS	1.1 (Natural Version 3.1.5 supports z/OS to the same extent as it supports OS/390; new features of z/OS will be supported only as of Natural Version 4.1)
VSE/ESA	2.3, 2.4 or 2.5 To use a global buffer pool: VSE/ESA Version 2.4 or above with the ESA/390 Subsystem Storage Protection Feature must be installed.  Natural for VSAM Version 3.1.5 requires that the corresponding VSE/VSAM Version is installed.
VM/ESA	2.3, 2.4
z/VM	3.1 or 4.1 (Natural Version 3.1.5 supports z/VM to the same extent as it supports VM/ESA; new features of z/VM will be supported only as of Natural Version 4.1)
Com-plete	5.1.3 or 6.1.1 (maintenance for Version 5.1.3 ends on Dec. 31, 2001)
CICS/ESA	4.1, CICS TS 1.2, 1.3 or 2.1
CICS/VSE	2.3, CICS TS 1.1 or 1.1.1
IMS/TM	6, 7
UTM	4 or 5
TIAM	All versions available with OSD Version 2, 3 or 4.

Software AG provides Natural support for the operating/teleprocessing system versions supported by their respective manufacturers. Generally, when an operating/teleprocessing 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 Natural on an old operating/teleprocessing system, Software AG can not continue to support operating/teleprocessing system versions that are no longer supported by the system's provider.

## Assemblers Required

Natural Version 3.1 requires one of the following assemblers for the assembly of its source modules:

- "HL" assembler (IBM),
- "Assembh" assembler (Siemens).

It may well be possible that the source modules can be assembled with older assemblers; however, Software AG cannot guarantee this.

## Migration

When migrating from an earlier Natural version to Natural for Mainframes Version 3.1.5, you must observe the following:

### Use of USR\* programs



Make sure that the latest USR\* programs from the delivered library SYSEXT are used.

If you have copied USR\* programs to your FUSER system file, you have to replace them before use.

### MAXBUFF Restrictions - RPC only

If you are using the ADALNK transport method to communicate with the EntireX Broker (default on mainframe), the following restrictions for MAXBUFF apply depending on the value specified for ACIVERS:

Value for ACIVERS	Maximum Value for MAXBUFF
ACIVERS=1	31
ACIVERS=2	30 (default value)
ACIVERS>2	30

### For those migrating from Natural 2.3 to 3.1:



If MAXBUFF=31 has been used before, you must adapt your NATPARAM in one of the following two ways:

1. specify ACIVERS=1 and leave MAXBUFF untouched
2. specify MAXBUFF=30 and leave ACIVERS untouched

The latter is recommended to enable the support of EntireX Security.

## Documentation

A completely updated set of documents is distributed with this release. In addition, the following major changes/enhancements have been made:

- A new Documentation Homepage template for all future online-based documentation sets has been introduced and adapted to the needs of the Natural documentation. This template serves the objective of having a common layout for Documentation Homepages across all of our products.

- To remove redundancies, the following parts of the Natural documentation have been reorganized.

## Statements Documentation

The structure of the statements documentation and the internal navigation have been improved, e.g. syntax boxes have been provided with internal links that enable rapid access to the relevant parts of the syntax descriptions.

## User's Guide, Operations Documentation

The Natural Profile Parameters, Session Parameters and Parameter Modules have been removed from the Operations and Reference documents and have been reorganized in a Parameter Reference document that is now common to all platforms (mainframe and non-mainframe).

Also, the system commands have been reorganized and transferred from the User's Guide to a document in the Reference documentation that is now common to all platforms and eliminates previous redundancies.

In addition, the new cross-platform documents feature improvements similar to those accomplished in the Statements documents.

## Reference Documentation

Also in response to the new Documentation Homepage template, the Reference document has been reorganized into the following parts:

- Programming Reference
- Parameter Reference
- Command Reference

These documents are available with the current edition of the Natural Documentation CD-ROM and will be published and updated via ServLine24 (<http://servline24.softwareag.com>) as well.

## Error Messages

To enable viewing and printing of error message explanations when no active Natural Version 3.1 nucleus is available, the English Natural error messages in the range of NAT0001 to NAT9999 are now documented in the Messages and Codes documentation. Library-specific messages and messages relating to other Software AG products are not included.

The German Natural error messages and warnings were updated with the release of Natural Version 3.1.5 and are available online within Natural.

## End of Maintenance of Natural Versions

With the release of Natural Version 3.1.5, the maintenance for Natural Version 3.1.3 for Mainframes ends. Extensions of the maintenance for Natural Version 3.1.3, if any, will be published via ServLine24 (<http://servline24.softwareag.com>).

Software AG strongly recommends that you migrate to Natural Version 3.1.5 as soon as possible. Migrating to Natural Version 3.1.5 will be inevitable if you intend to establish a Single Point of Development environment.

## Natural and Other Software AG Products

To use the following Software AG products in conjunction with Natural Version 3.1, the following product versions (or above) are required:

Product	Prod. Code	Version
Adabas	ADA	7.1.2 (Version 7.1.2 is supported to the same extent as it supports Version 6.2; new features of Adabas Version 7.1.2 will be supported only as of Natural Version 4.1)
Adabas Online System	AOS	7.1.2
Adabas SQL Server	ESQ	1.4.3
Adabas Review	REV	4.1.3
Adabas Text Retrieval	TRS	2.1.4
Com-plete	COM	6.1.1
Con-form	CMF	3.3.1
Con-nect	CNT	3.3.1
EntireX Broker Stub	EXX	5.3.1, 6.1.1 Version-compatibility with EntireX Broker is required.
Entire Event Management	NCL	2.1.2
Entire Net-Work	WCP	5.6.1 (This product is required if you are using Natural Security in a heterogeneous environment.)
Entire Operations	NOP	3.2.1
Entire Output Management	NOM	2.1.1
Entire System Server	NPR	3.1.1
Entire System Server Interface	---	The Entire System Server Interface (ESX) is no longer a separate product but part of Natural (and included on the Natural installation tape). See also Installing the Entire System Server Interface in the Natural Installation Guide for Mainframes.
Entire Transaction Propagator	ETP	1.4.1
EntireX DCOM	EXX	5.3.1, 6.1.1 (required for NaturalX only)
Natural Advanced Facilities	NAF	2.3.7
Natural CICS Interface	NCI	2.3.7
Natural Connection	NTC	3.1.5
Natural Construct	CST	4.3.1

<b>Product</b>	<b>Prod. Code</b>	<b>Version</b>
Natural Development Server	NDV	1.1.1
Natural Document Management	NDM	1.6.3
Natural for DB2	NDB	3.1.5 (this version supports DB2 V5R1; V6R1 and V7R1 are supported to the same extent as with V5R1; new features of DB2 V6R1 and V7R1 will be supported only as of Natural for DB2 Version 4.1)
Natural for DL/I	NDL	2.3.7
Natural for SQL/DS	NSQ	3.1.5
Natural for VSAM	NVS	3.1.5
Natural IMS/TM interface	NII	2.3.7
Natural ISPF	ISP	2.4.4
Natural Optimizer Compiler	NOC	2.3.7, 3.1.5 Beta Version
Natural Security for Mainframes	NSC	3.1.5
Natural TIAM interface	NRT	3.1.5
Natural TSO interface	NTI	3.1.5
Natural UTM interface	NUT	3.1.5
Natural VM/CMS Interface	NCM	3.1.5
NaturalX	NXX	3.1.4
Predict	PRD	4.1.2 (if both the Natural Development Server and Predict are installed, then Predict Version 4.2.1 is required)
Predict Application Control	PAC	2.2.2
Predict Case	PCA	2.5.2
Review Natural Monitor	RNM	3.6.2
Super Natural	NSN	3.3.2

Although it may be technically possible to run versions of other Software AG products older than the ones listed above in conjunction with a new version of Natural, Software AG can not continue to support such combinations.

## DRS Printing Facility

Software AG introduces Levi, Ray & Shoup, Inc. (LRS) as an Authorized Partner for Natural Printing Solutions. Natural provides an interface to the LRS Enterprise Print Management family of products. This interface enables you to route the Natural print output to the LRS Dynamic Report System (DRS).

For more details, see also the LRS homepage at <http://www.lrs.com/epm/drs.htm>.

## Information on Upcoming Releases

With the next major release of Natural (Version 4.1), it is planned to introduce the following:

- ENDING AT Clause in READ or HISTOGRAM Statements
- Discontinued Support of Applications Cataloged with Natural Version 2.2
- Delivery of SYSPC Utility Discontinued

### ENDING AT Clause in READ or HISTOGRAM Statements

In previous Release Notes, a change notice concerning a planned change in the semantics of the THRU keyword in Natural Version 4.1 was included. This change will not be implemented. The semantics of the THRU keyword will remain unchanged.

### Discontinued Support of Applications Cataloged with Natural Version 2.2

With the next major release of Natural (Version 4.1), applications that were cataloged with Natural Version 2.2 can be executed without any conversion procedure being required, and without your having to make any adjustments to the programs except for the ones mentioned in the Natural Version 4.1 Release Notes for Mainframes.



However, the next major release of Natural following Version 4.1 will require that all such applications are recataloged to be executed with that version.

Software AG strongly recommends that existing applications be recataloged with Natural Version 3.1 to take advantage of improved runtime handling for such objects.

### Delivery of SYSPC Utility Discontinued

With the next major release of Natural (Version 4.1), the delivery of the SYSPC utility will be discontinued. Software AG recommends that existing applications using the SYSPC utility be modified so that they can be used with the utility SYSTRANS, NATLOAD or NATUNLD instead. With Entire Connection Version 4.2.1, new transfer tasks are provided that no longer require the SYSPC utility.