software AG

Adabas

Release Notes

Version 8.5.4

April 2020

ADABAS & NATURAL

This document applies to Adabas Version 8.5.4 and all subsequent releases.

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

Table of Contents

1 Release Notes

This document provides a brief summary of the new and changed features included in Adabas 8.5, with links for more information to other areas of the Adabas documentation set.

⚠ **Important:** Be sure that you apply all supplied Adabas 8 maintenance and concatenate Adabas 8 patch-level libraries (L00*n*), as they are delivered to you. This will ensure that your Adabas 8 code remains up-to-date, supporting all Adabas 8 features as they are enhanced and maintained.

If you are upgrading to this Adabas release from a release prior to the most recent Adabas release (for example, if you are upgrading from Adabas 8.3 to Adabas 8.5 and skipping the intermediate upgrade to Adabas 8.4), please read the Release Notes for the releases you are skipping to get a complete understanding of all of the changes implemented in Adabas since you last updated your software.

This document covers the following topics:

Supported Operating System Platforms	Describes the currently supported operating environments for this version of Adabas.
Enhancements	Describes the new and changed features in Adabas 8.5.
Installation and License	Describes the new and changed features concerning installation and licensing in Adabas 8.5.
Future Plans	Describes future plans of Adabas, such as any plans for Adabas to stop supporting specific features.
Limitations and Restrictions	Lists the limitations and restrictions currently existing in this version of Adabas.
Adabas Data Set Compatibility	Describes the compatibility of Adabas data sets across Adabas releases.
Applying Zaps	Describes general information on where to locate and how to apply Adabas zaps.

Software AG Mainframe Product Compatibility	Describes the compatibility of this version of Adabas with other Software AG mainframe products.
Using COR-based Add-ons	Describes using the COR-based Add-on products Adabas System Coordinator (COR), Adabas SAF Security (AAF), Adabas Fastpath (AFP), Adabas Transaction Manager (ATM), and Adabas Vista (AVI) with this version of Adabas.
AFPLOOK /AVILOOK Considerations	Describes considerations regarding the demo programs AFPLOOK and AVILOOK.
End of Maintenance	Describes how you can determine the end-of-support dates for your Software AG products.
Documentation and Other Online Information	Describes the documentation and other online information you can obtain for this release of Adabas.

2 About this Documentation

Document Conventions

Convention	Description
Bold	Identifies elements on a screen.
`Monospace font`	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.
|	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

Product Documentation

You can find the product documentation on our documentation website at **https://documentation.softwareag.com**.

In addition, you can also access the cloud product documentation via **https://www.software-ag.cloud**. Navigate to the desired product and then, depending on your solution, go to "Developer Center", "User Center" or "Documentation".

Product Training

You can find helpful product training material on our Learning Portal at **https://knowledge.softwareag.com**.

Tech Community

You can collaborate with Software AG experts on our Tech Community website at **https://tech-community.softwareag.com**. From here you can, for example:

■ Browse through our vast knowledge base.

■ Ask questions and find answers in our discussion forums.

■ Get the latest Software AG news and announcements.

■ Explore our communities.

■ Go to our public GitHub and Docker repositories at **https://github.com/softwareag** and **https://hub.docker.com/publishers/softwareag** and discover additional Software AG resources.

Product Support

Support for Software AG products is provided to licensed customers via our Empower Portal at **https://empower.softwareag.com**. Many services on this portal require that you have an account. If you do not yet have one, you can request it at **https://empower.softwareag.com/register**. Once you have an account, you can, for example:

■ Download products, updates and fixes.

■ Search the Knowledge Center for technical information and tips.

■ Subscribe to early warnings and critical alerts.

■ Open and update support incidents.

■ Add product feature requests.

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.

3 Supported Operating System Platforms

Software AG generally provides support for the operating system platform versions supported by their respective manufacturers; when an operating system platform provider stops supporting a version of an operating system, Software AG will stop supporting that version.

For information regarding Software AG product compatibility with IBM platforms and any IBM requirements for Software AG products, please review the *Product Compatibility for IBM Platforms* web page.

Before attempting to install this product, ensure that your host operating system is at the minimum required level. For information on the operating system platform versions supported by Software AG products, complete the following steps.

1. Access Software AG's Empower web site at *https://empower.softwareag.com*.

2. Log into Empower. Once you have logged in, you can expand **Products & Documentation** in the left menu of the web page and select **Product Version Availability** to access the Product Version Availability screen.

3. Use the fields on the top of this screen to filter its results for your Software AG product. When you click the **Search** button, the supported Software AG products that meet the filter criteria are listed in the table below the filter criteria.

   This list provides, by supported operating system platform:

   - the Software AG general availability (GA) date of the Software AG product;

   - the date the operating system platform is scheduled for retirement (OS Retirement);

   - the Software AG end-of-maintenance (EOM) date for the product; and

   - the Software AG end-of-sustained-support (EOSS) date for the product.

   > **Note:** Although it may be technically possible to run a new version of your Software AG product on an older operating system, Software AG cannot continue to support operating system versions that are no longer supported by the system's provider. If you have questions

about support, or if you plan to install this product on a release, version, or type of operating system other than one listed on the Product Version Availability screen described above, consult Software AG technical support to determine whether support is possible, and under what circumstances.

4 Enhancements

This chapter lists the Adabas 8.5 enhancements.

Category	Enhancements
Adabas 8.5 SP4 Enhancements	*Utility Consolidation*
	Support for New Releases of Products
	Adabas Auditing for Mainframes
	Performance Enhancements
	Adabas Online Services for z/OSMF Utility Server
Adabas 8.5 SP3 Enhancements	*Support for New Products*
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	Security-Related Enhancements
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	ADARUN Enhancement
	Utility Enhancements
	Adabas 8.5 SP1 Miscellaneous Changes and Enhancements
	Point-to-Point Support for Adabas (ADATCP)
	TCP/IP Socket Support for Batch/TSO (z/OS only)
	New Code Page Conversion System ICS

Adabas 8.5 SP4 Enhancements

- Utility Consolidation
- Support for New Releases of Products
- Adabas Auditing for Mainframe
- Performance Enhancements

- Adabas Online Services for z/OSMF Utility Server

Utility Consolidation

As announced in the Release Notes for previous Adabas versions, utilities ADAACK, ADADCK, ADAICK, ADAPRI, and ADAVAL have now been consolidated into the single utility ADACHK. Utilities ADAACK, ADADCK, ADAICK, ADAPRI, and ADAVAL are no longer supported, and you are now required to use the new ADACHK utility instead. To determine which ADACHK utility function to use, read *ADACHK Function Equivalences with Other Utility Functions*.

Support for New Releases of Products

Adabas 8.5 SP4 provides support for the following new releases of products that are not included in the Adabas library:

Release Date	Products
October 2023	Adabas Manager 9.2 SP0
	Adabas Review 5.3 SP1
	Entire Net-Work 6.6 SP1
	Entire Net-Work 6.6 Light SP1
October 2022	Adabas Auditing 2.2 SP2
	Adabas Manager 9.1 SP0
	Adabas Review 5.2 SP2
	Adabas SAF Security 8.4 SP1
	Entire Net-Work Light 6.5 SP1
October 2021	Adabas Auditing 2.2 SP1
	Event Replicator for Adabas 4.1 SP1

The above product releases may also be used with previous Adabas 8.5 releases, but additional service may be required. Details are supplied in the individual product release notes and/or ZAPS data sets.

Adabas Auditing for Mainframe

With the new Adabas add-on product Adabas Auditing for Mainframes, several enhancements touch Adabas components. Most notably, a new direct access container type ALOG is available (DDNAME DDALOGRx). It is used to record the Audit Events by the Adabas Auditing server on behalf of the Adabas nuclei. Please see the *Adabas Auditing for Mainframe* documentation for details.

Performance Enhancements

Pageable Large Page Support (z/OS only)

Adabas V8.5 SP1 and later extends support for large pages to include pageable large pages.

Pageable large page support allows storage to be backed by 1M large pages without the configuration restrictions of fixed large page support (e.g. by reserving space via the LFAREA parameter in SYS1.PARMLIB member IEASYSxx).

To check the availability of pageable large pages, refer to the IBM documentation for z/OS and for the features supported by your CPU model.

Additional options to the ADARUN LARGEPAGE parameter are defined, allowing you to indicate whether your Adabas nucleus should attempt to make use of pageable large pages. For more information, see *LARGEPAGE : Large Page Support Option*.

Note that the implementation of pageable large page support by IBM indicates a preference for the storage to be backed by pageable large pages. If no pageable large pages are available, or if certain operations (e.g. page-fixing) are performed against storage backed by pageable large page, storage backed by 1M large page can get demoted to being backed by pageable 4K pages during the run time of the job. Once storage has been demoted to being backed by 4K pages, it will continue to be backed by 4K pages for the remaining duration of the job. The success or otherwise of the request to allocate storage backed by large pages is indicated via the ADAI39 and ADAI44 messages described in the Messages manual. If an area of storage initially backed by large pages is later demoted to 4K pages, there is no indication of this within the Adabas job.

An attempt to allocate storage using pageable large pages will occur in the following situations:

- In an Adabas nucleus running with LARGEPAGE=P64 and V64BIT=YES, an attempt to allocate storage below the 2G bar backed by pageable large pages will be made for the large buffer area associated with various ADARUN parameters, including LBP, LFP, and LWP. The flush I/O pool (ADARUN parameter LFIOP) will be allocated above the 2G bar in storage backed by 4K pages. No attempt is made to allocate flush I/O pool storage above the 2G bar using 1M pageable large pages, as this area is used for I/O and will therefore get demoted to being backed by 4K pages.

- In an Adabas nucleus running with LARGEPAGE=P64 and V64BIT=NO, an attempt to allocate storage below the 2G bar backed by pageable large pages will be made for the large buffer area associated with various ADARUN parameters, including LBP, LFP, LWP, and LFIOP. Users

should note that potentially large parts of this buffer area (those used for I/O) are subject to being demoted to being backed by 4K pages. For these areas, any potential performance benefit in using 1M pageable large pages will be lost for the duration of the job.

- In an Adabas Parallel Services environment, specifying CLUCACHETYPE=P64 will attempt to allocate storage above the 2G bar backed by pageable large pages for the global cache area (ADARUN parameter CLUCACHESIZE).

- In an Adabas Parallel Services environment, specifying LARGEPAGE=P64 and V64BIT=YES will attempt to allocate storage above the 2G bar backed by pageable large pages for the cast-out directory buffer (size derived internally and not associated with any single ADARUN parameter).

- With Event Replicator V4.1 SP1 or later, in an Event Replication Server, specifying LARGE-PAGE=P64 and V64BIT=YES will attempt to allocate storage above the 2G bar backed by pageable large pages for the replication pool (ADARUN parameter LRPL).

- With versions of Event Replicator prior to V4.1 SP1, in an Event Replication Server, specifying LARGEPAGE=P64 and V64BIT=YES will attempt to allocate storage below the 2G bar backed by pageable large pages for the replication pool (ADARUN parameter LRPL).

- For all supported versions of Event Replicator, in an Event Replication Server, specifying LARGEPAGE=P64 and V64BIT=NO will attempt to allocate storage below the 2G bar backed by pageable large pages for the replication pool (ADARUN parameter LRPL).

- For all supported versions of Event Replicator, an Adabas nucleus running with REPLICA-TION=YES, specifying LARGEPAGE=P64 and V64BIT=YES will attempt to allocate storage above the 2G bar backed by pageable large pages for the replication pool (ADARUN parameter LRPL).

- For all supported versions of Event Replicator, an Adabas nucleus running with REPLICA-TION=YES, specifying LARGEPAGE=P64 and V64BIT=NO will attempt to allocate storage below the 2G bar backed by pageable large pages for the replication pool (ADARUN parameter LRPL).

- In an Adabas nucleus running with AUDITING=YES or in an Auditing Server, specifying LARGEPAGE=P64 and V64BIT=YES will attempt to allocate storage above the 2G bar backed by pageable large pages for the auditing pool (ADARUN parameter LAP, described in the *Adabas Auditing* documentation).

- In an Adabas nucleus running with AUDITING=YES or in an Auditing Server, specifying LARGEPAGE=P64 and V64BIT=NO will attempt to allocate storage below the 2G bar backed by pageable large pages for the auditing pool (ADARUN parameter LAP, described in the *Adabas Auditing* documentation).

- In an Adabas nucleus running with the Adabas Caching Facility active, allocation of the various storage areas using pageable large pages will be attempted according to extensions to the associated Adabas Caching Facility parameters. These parameters are described in the ADARUN parameters section of the *Operations* manual.

Adabas Online Services for z/OSMF Utility Server

Adabas 8.5 SP4 in conjunction with Adabas Manager 9.2 SP0 introduces the Adabas Online Services for z/OSMF Utility Server (AOZ). AOZ is a RESTful server that leverages IBM's z/OSMF framework to provide APIs for Adabas Manager (AMN) to enable Adabas utility job submission and job output display.

The following section describes how to install the AOZ server. Refer to the Adabas Manager documentation for information on the features that require the installation of the AOZ server.

Note: The AOZ server is distributed with Adabas Online Services 8.5 SP4.

- AOZ Server Licensing Requirements
- AOZ Server Installation Overview
- AOZ Server Installation Steps

AOZ Server Licensing Requirements

For correct operation of the AOZ server, the Adabas Online Services license file must be available in the target Adabas server(s) being administered by Adabas Manager.

AOZ Server Installation Overview

The following table describes the overview for a successful installation of the AOZ server.

Step	Description
1	Create a UNIX System Services installation directory.
2	Copy the AOZ package to the installation directory.
3	Extract the AOZ package into the installation directory.
4	Copy the sample JCL to the z/OS procedure library.
5	Tailor the sample JCL for starting the AOZ server.

AOZ Server Installation Steps

The following table describes the detailed steps to successfully install the AOZ server.

Step	Description
1	**Create a UNIX System Services installation directory.** Create a directory in the UNIX System Services file system to use as your installation directory. For the purposes of these installation instructions, the chosen installation directory is '/opt/softwareag'.

Step	Description
	`$ mkdir -p /opt/softwareag`
2	**Copy the AOZ package to the installation directory.** Copy the AOZ distribution package to the '/opt/softwareag' installation directory. `cp "//'hlq.AOZvrs.TAR'" /opt/softwareag/AOZvrs.tar.Z`

3	**Extract the AOZ package into the installation directory.**
	
	Extract the contents of the AOZ package in the UNIX System Services installation directory.
	
	`$ cd /opt/softwareag`
	`$ uncompress < AOZvrs.tar.Z | tar -oxf -`
	
	The following components are extracted into '/opt/softwareag/aoz':
	
	■ `aoz-server-<version>.jar` – AOZ server .jar file
	
	■ `AOZSTC` – Sample JCL to run the AOZ server as a started task

4	**Copy the sample JCL to the z/OS procedure library.**
	
	Copy the sample JCL for the AOZ server started procedure to the z/OS procedure library.
	
	`$ cd /opt/softwareag/aoz`
	`$ cp AOZSTC "//'hlq.PROCLIB(AOZSTC)'"`

5	**Tailor the sample JCL for starting the AOZ server.** Modify the following variables in the JCL for the started procedure: ■ `ZOSMF` – URL of z/OSMF ■ `JAVA` – Java installation directory ■ `AOZDIR` – Full path to the AOZ installation directory ■ `AOZVER` – Version number of the AOZ server .jar file ■ `AOZPORT` – Port number for the AOZ server to listen on

Adabas 8.5 SP3 Enhancements

- Support for New Products
- Support for New Releases of Products
- Updated ICS Library

Support for New Products

Adabas 8.5 SP3 provides support for the following new products in the Adabas realm:

- Adabas Auditing for z/OS
- Adabas Encryption for z/OS

Support for New Releases of Products

Adabas 8.5 SP3 provides support for the following new releases of products that are not included in the Adabas library:

- Adabas Review 5.2
- Adabas SAF Security 8.3

Updated ICS Library

Adabas 8.5 SP3 uses the updated ICS 3.1.1 library based on International Components for Unicode (ICU V65).

Databases that have enabled Universal Encoding Support must change their JCL. The changed JCL must include the new ICS311.L*xxx* library in the STEPLIB/TASKLIB chain.

Adabas 8.5 SP2 Enhancements

- SVC Installation Enhancement
- zIIP Statistics Enhancement

- Security-Related Enhancements

SVC Installation Enhancement

When starting a nucleus, a check is made with the System Access Facility (SAF) security server to either allow the nucleus to start without APF authorization or prohibit access based on a security profile rule in the FACILITY class. With Version 8.5.2, you can now specify a different class when installing the SVC. For further information, refer to *Initializing the Adabas Communication Environment* in the *Installation for z/OS* documentation.

This enhancement was also made available to earlier releases by fixes AO851011, AO843017, AO842011 and AO835028.

zIIP Statistics Enhancement

If an Adabas nucleus is started with ZIIP=YES on a system (LPAR) with no zIIPs (System z Integrated Information Processors), the zIIP-related statistics in the Adabas session or interval statistics, in the outputs of operator command and ADADBS OPERCOM DZSTAT, and in the AOS zIIP Statistics screen now directly show the potential zIIP offload rate that Adabas could have achieved if a zIIP had been available.

For further information, refer to *Understanding the zIIP-Related Statistics* in the *Adabas for zIIP* documentation.

Security-Related Enhancements

In conjunction with Adabas SAF Security version 8.2 SP2 Patch level 2 or above, Adabas 8.5 SP2 provides start-up protection for Entire Net-Work jobs.

When starting an Entire Net-Work job, Adabas SAF Security uses the access level of the User ID assigned to the job to determine:

- whether to permit the start-up.
- whether to run in WARN mode or FAIL mode.

This provides an identical level of start-up protection as that currently provided for Adabas nuclei.

Refer to the *Operations* section of the *Adabas SAF Security* documentation for more information on Adabas SAF Security operation in Entire Net-Work.

Adabas 8.5 SP1 Enhancements

- Streamlining of the Installation
- zIIP Performance Enhancements
- Security-Related Enhancements
- ADARUN Enhancement
- Utility Enhancements
- Adabas 8.5 SP1 Miscellaneous Changes and Enhancements
- Point-to-Point Support for Adabas (ADATCP)
- TCP/IP Socket Support for Batch/TSO (z/OS only)
- New Code Page Conversion System ICS

Streamlining of the Installation

From Adabas Version 8.5.1 onward, a number of add-on products that were previously distributed on separate libraries are now included in the ADA library:

- Adabas Caching Facility (ACF)

- Adabas Cluster Services (ALS)

- Adabas Delta Save Facility (ADE)

- Adabas Online System (AOS)

- Adabas Parallel Services (ASM)

Separate license files are required for using these add-ons. Also, jobs used for applying zaps to them may need to be adjusted.

Refer to *Installation and License* for details.

zIIP Performance Enhancements

When the Adabas nucleus or an Adabas utility is running with ADARUN parameter ZIIP=YES, Adabas 8.5 offers the following performance enhancements:

- Adabas utilities with many I/O operations to sequential input or output datasets will see substantial reductions in the overall CPU consumption on general processors and zIIPs, along with increases to their zIIP offload rates.

- Adabas nuclei will see fewer TCB/SRB mode switches for timer services.

- Adabas nuclei running with Review, as well as Event Replicator (Reptor) servers, will see fewer TCB/SRB mode switches for subtask waits.

- The ADATCP subtask of the Adabas nucleus (see also *Point-to-Point Support for Adabas (ADATCP)* below) is now zIIP-enabled.

Security-Related Enhancements

In conjunction with Adabas SAF Security, the following security-related enhancements are now available:

- Protecting Nucleus Administration Functions
- Protecting Utilities at The Function/File Level
- Nucleus Audit Logging of Adabas Security Violations

Refer to *Adabas Security* for a general description of the security measures that are available to prevent unauthorized access to the Adabas environment.

Protecting Nucleus Administration Functions

Nucleus administration functions can now be protected ensuring unauthorized use of such functions is disallowed.

For example, a user or group may be allowed to display particular nucleus session parameters but disallowed from modifying them.

This new level of protection is provided in addition to the existing protection available for Adabas Utilities and Adabas Basic Services.

Refer to the *Operations* section of the *Adabas SAF Security* documentation for more information on this topic including the list of applicable administration functions and the format of the resource names used.

Protecting Utilities at The Function/File Level

The execution of utilities can now be protected at the utility function/file level, extending the existing name-level protection.

For example, a user or group may be allowed to run ADASAV SAVE but not ADASAV RESTORE. Or, a user or group may be allowed to run ADASAV SAVE FILE=10 but not ADASAV SAVE FILE=20.

Refer to the *Operations* section of the *Adabas SAF Security* documentation for more information on this topic including the list of applicable utility functions and the format of the resource names used.

Nucleus Audit Logging of Adabas Security Violations

Adabas Security violations (against file permission levels defined using ADASCR) can now be logged to external security packages that support the use of the general-purpose security-audit request RACROUTE REQUEST=AUDIT.

Refer to the *Operations* section of the *Adabas SAF Security* documentation for more information on this topic.

ADARUN Enhancement

ADARUN now checks the version indicators in the modules that it loads and reports differences to its own version indicators. For modules belonging to the Adabas base product, ADARUN checks the version, release and patch-level indicators. For modules belonging to Adabas add-on products, ADARUN checks the version and release indicators. ADARUN lists the modules whose version indicators do not match.

If the Adabas SAF Security add-on product is installed, ADARUN terminates with the new Error-25 if one of these version checks fails.

Utility Enhancements

This section describes the utility enhancements made in Adabas version 8.5.

- New ADADBS parameter INPARALLEL

New ADADBS parameter INPARALLEL

A number of ADADBS functions accept the new parameter INPARALLEL=YES|NO:

- With YES, the function may be executed even if other users are active on the target file.

- With NO (the default), the function requires exclusive file control, as before.

The INPARALLEL parameter may be specified for these functions:

- ADADBS CHANGE FILE=fnr,FIELD=de,OPTION=NOUQ[,INPARALLEL=YES|NO]

- ADADBS DSREUSE FILE=fnr,MODE=ON|OFF[,INPARALLEL=YES|NO]

- ADADBS ISNREUSE FILE=fnr,MODE=ON|OFF[,INPARALLEL=YES|NO]

- ADADBS MODFCB FILE=fnr,...[,INPARALLEL=YES|NO] – unless FILEREADONLY=YES or LOBFILE is also specified

- ADADBS NEWFIELD FILE=fnr[,INPARALLEL=YES|NO]

- ADADBS RELEASE FILE=fnr,DESCRIPTOR=de[,INPARALLEL=YES|NO]

- ADADBS RENAME FILE=fnr,NAME=newname[,INPARALLEL=YES|NO] – except for FILE=0 (rename database)

■ ADADBS REPLICATION FILE=fnr,...[,INPARALLEL=YES|NO]

For more information, refer to the above functions of the *ADADBS* utility, in the *Adabas Utilities Manual*.

Adabas 8.5 SP1 Miscellaneous Changes and Enhancements

Adabas 8.5 SP1 provides the following miscellaneous changes and enhancements:

- ■ Protection Records now Contain an 8-byte Timestamp (STCK)

Protection Records now Contain an 8-byte Timestamp (STCK)

Work and PLOG records now contain an 8-byte timestamp (STCK). With Adabas Version 8.5, the 8-byte timestamp is now always included on all protection records. This was true for cluster databases in prior versions and will now be true for noncluster databases as well. In addition, the timestamp will be retained on the sequential protection logs. This was an enhancement requested for both diagnostic and auditing purposes.

Now each record contains the exact timestamp of when the update was made for both the dual protection logs and also the sequential protection logs. In previous versions the sequential protection records shared the timestamp of the header so ADASEL reporting was always not precisely accurate per record.

The existing STARTING FROM and ENDING AT clauses can be used to restrict selections to records added, updated, or deleted within a time range. These parameters remain the same but ADASEL now does its selection based off the timestamps in individual PLOG records rather than just the timestamp for the PLOG block.

The additional timestamp on each protection record slightly increases the amount of data written to the Work and PLOG datasets for non-cluster databases. The utilization of Work and PLOGs should be watched and if necessary, their sizes adjusted.

Point-to-Point Support for Adabas (ADATCP)

ADATCP is a subset of an Entire Net-Work kernel that runs as a subtask in an Adabas session. It provides direct communication with application programs, eliminating the need for intermediate Net-work kernels.

- ■ New Prerequisites for ADATCP
- ■ ADATCP and Adabas Directory Server
- ■ New ADATCP Parameters
- ■ ADATCP Robustness
- ■ ADATCP and zIIP

■ New Simple Connection Line Driver (TCPX) DRIVER and LINK Parameters

New Prerequisites for ADATCP

Using Point-to-point support for Adabas (ADATCP) requires Entire Net-Work Version 6.5 SP2 or above and Entire Net-Work TCP/IP Option Version 6.5 SP1 or above.

A valid Entire Net-Work license is now required for ADATCP. Because the Adabas nucleus and the ADATCP kernel can both read DDLIC to obtain their license, it is recommended that the Entire Net-Work license be assembled into a load module. Entire Net-Work licensing requires MLC135 or above.

See *Software AG Mainframe Product Licensing* for more information.

ADATCP and Adabas Directory Server

ADATCP now works with the Adabas Directory Server (ADI).

New ADATCP Parameters

New parameters may be provided to ADATCP via the TCPIN DD statement. See *New Simple Connection Line Driver (TCPX) DRIVER and LINK Parameters* below for details.

ADATCP Robustness

Internal enhancements have been made to ADATCP to improve stability and robustness.

ADATCP and zIIP

ADATCP now runs in zIIP mode when the Adabas session has zIIP active.

New Simple Connection Line Driver (TCPX) DRIVER and LINK Parameters

The following table summarizes the new Simple Connection Line Driver (TCPX) DRIVER and LINK parameters introduced:

Parameter	DRIVER or LINK Statement?	New or Changed?	Description	Introduced in Release
ADI	DRIVER	New	This parameter was added to the TCPX line driver in this release. It specifies whether Adabas Directory Server (ADI) support is enabled or disabled.	8.5 SP1
ADIHOST	DRIVER	New	This new parameter specifies the hostname of the Adabas Directory Server (ADI). The hostname is used to attempt to acquire the TCP/IP address of the system where the ADI resides.	8.5 SP1

Parameter	DRIVER or LINK Statement?	New or Changed?	Description	Introduced in Release
ADIPART	DRIVER	New	This new optional parameter specifies the partition name to be used with the Adabas Directory Server (ADI). If specified, the partition name will be included in all target entries added to the ADI by this session. Partitions are used to restrict database access; when an application queries the ADI for a target and specifies a partition, only entries with the same partition name are returned. Likewise, if the query does not specify a partition, only entries that do not have a partition are returned.	8.5 SP1
ADIPORT	DRIVER	New	This new parameter specifies the port number used to communicate with the Adabas Directory Server (ADI).	8.5 SP1

For more information about TCPX DRIVER statement parameters, read *TCPX DRIVER Statement* in the *Entire Net-Work TCP/IP Option* documentation.

TCP/IP Socket Support for Batch/TSO (z/OS only)

TCP/IP Socket Support for Batch/TSO is provided with Adabas Version 8.5 SP2.

For information regarding the enabling of this support, read Enabling TCP/IP Socket Support for Batch/TSO in the *Adabas Installation for z/OS* documentation.

New Code Page Conversion System ICS

The Universal Encoding Support (UES) in Adabas 8.5 has been changed to use the International Components for Unicode for Software AG (ICS). ICS is an alternative code page conversion subsystem. Its use with Adabas was introduced as an option in Adabas 8.4 SP2 and was made the default with Adabas for zIIP 8.4 SP3. ICS is based on International Components for Unicode (ICU V58.2), an open source project initiated by IBM (**http://site.icu-project.org**). ICU is already being used with other Software AG products like Natural for Mainframes and Adabas on Linux, UNIX and Windows.

The code page modules of ICS are provided in the separate ICS221.L*nnn* load library. If the Universal Encoding Support is to be used, the ICS library must be concatenated to the ADA852.LOAD library in the Adabas nucleus/utility job or job step.

ICS does not require the SMARTS runtime system (APS). It supports the same code pages as ECS. When used with Adabas for zIIP, ICS is more efficient than ECS in converting text between code pages.

For additional information about setting up connections to UES-enabled databases using ICS, see *Enabling Universal Encoding Support (UES) for Your Adabas Nucleus*.

5 Installation and License

Starting with Version 8.5 SP1, the Adabas installation package includes a set of sub-products or add-ons. In order to be able to use the sub-products they must be licensed and the corresponding product license file must be provided with the nucleus or utility execution. The following has changed:

License Requirements

From Adabas Version 8.5 SP3 onward, MLC Version 1.3.6 or higher is required.

The error ADANLA occurs if an incompatibility is detected between the Adabas version and the version of the Mainframe License Check (MLC) component.

License file version checking is only done at the version level and not at the release or SM-level. This means that you must have a valid license file(s) for the version of Adabas you are installing. Regardless of whether you are installing a new Adabas version, release, SM-level, or upgrading to a new MLC version, Software AG strongly recommends that you perform an early validation check of your license file(s) to avoid any possible interruption to your install/upgrade plans. If your license file(s) appear incompatible with your product upgrades, contact Software AG and request an updated license file.

For complete information about the licensing process for Software AG mainframe products, read *Software AG Mainframe Product Licensing*, in the *Software AG Mainframe Product Licensing*.

Adabas and Add-On Licenses

The following table describes for a product the member name of the license load module created with LICUTIL and the DD/link name for the license file.

Product	Product Code	Load Module	DD/Link Name
Adabas	ADA	ADALIC	DDLIC
Adabas for ZIIP	AZPAD	AZPADLIC	DDLAZPAD
Adabas Replication for ZIIP	AZPRP	AZPRPLIC	DDLAZPRP
Adabas Caching Facility	ACF	ACFLIC	DDLACF
Adabas Delta Save	ADE	ADELIC	DDLADE
Adabas Encryption	AEZ	AEZLIC	DDLAEZ
Adabas Auditing	ALA	ALALIC	DDLALA
Adabas Cluster Services	ALS	ALSLIC	DDLALS
Adabas Parallel Services	ASM	ASMLIC	DDLASM
Adabas Online Services	AOS	AOSLIC	DDLAOS

Product	Product Code	Load Module	DD/Link Name
Adabas Replication Facility	ARF	ARFLIC	DDLARF

Add-On Product Modules Contained in the ADAvrs.LOAD Library

From Adabas Version 8.5.1 onward, the following add-on products that were previously distributed on separate libraries are now included in the ADA*vrs*.LOAD library:

Component	Old library	New library	Modules
Adabas Caching Facility (ACF)	ACF*vrs*.LOAD	ADA*vrs*.LOAD	ADACSH ADACSZ ADACS1 ADACS6
Adabas Cluster Services (ALS)	ALS*vrs*.LOAD	ADA*vrs*.LOAD	ADAXCF ADAXEC ADAXEL
Adabas Delta Save Facility (ADE)	ADE*vrs*.LOAD	ADA*vrs*.LOAD	ADADSFN ADADSFR ADADSFS ADAMGS DSFUEX1
Adabas Online System (AOS)	AOS*vrs*.LOAD	ADA*vrs*.LOAD	ADAAOS
Adabas Parallel Services (ASM)	ASM*vrs*.LOAD	ADA*vrs*.LOAD	ADASMC ADASML ADASMM ADAS6C

Modules in components ACF, ALS, ADE, AOS and ASM are now included in the ADA*vrs* library. This means that, when applying zaps to components ACF, ALS, ADE, AOS or ASM on z/OS, the SYSLIB DD in the IMASPZAP job must point to the ADA*vrs* load library. Note that the zap identifiers are unchanged (AH*vrsnnn* for ACF, AP*vrsnnn* for ALS, AL*vrsnnn* for ADE, AS*vrsnnn* for ASM).

For users installing via System Maintenance Aid (SMA), the SMA copy jobs have been updated to take account of the streamlined product delivery. Users installing products via SMA should refer to the *System Maintenance Aid* documentation.

To use the various sub-products which are now delivered with ADA*vrs*, it is necessary for users to install a valid product license for the component. For information on installing product licenses, please refer to *Adabas and Add-on Licenses* and the description given in *Installing an Adabas Database*.

Future Adabas versions will also contain all the add-on products being shipped with Adabas Version 8.5.1.

6 Future Plans

The following plans are in place for a future release of Adabas.

- The Adabas 8 LGBLSET macro parameter REVREL= is now redundant and will be dropped in a future version. Please remove any use of this parameter in order to avoid future assembly errors. Refer to the current z/OS parameter description *REVREL: Adabas Review Release* for more information on this parameter.

- Documentation to support user defined Adabas device types will be removed in a future release. From this point, any users still requiring non-standard Adabas device types will need to contact their Software AG support representative for assistance.

- ⚠ **Important:** Support for z/VSE and BS2000 will be dropped with the next release.

7 Limitations and Restrictions

The following limitations and restrictions exist in this version of Adabas. Enhancements to resolve these limitations may be considered in a future release.

1. The following restrictions and limitations apply to large object (LB) fields in this release:

   - At this time, character conversion of LB field values from one code page to another is not supported. This functionality may be considered in a future release.

   - Some utility parameters are not supported for files containing LB fields. For more information, refer to the documentation for the utility in *Adabas Utilities Manual* and to the utility limitations and restrictions, provided later in this chapter.

   - At this time, large object (LB) fields can be define only with format A.

2. The new format buffer length indicator is only supported for LA and LB fields. Future versions of Adabas will consider supporting the specification of the length indicator for other fields too. For more information about the format buffer length indicator, read *Length Indicator (L)*, in the *Adabas Command Reference Guide*.

3. The prefetch feature is not supported in ACBX interface direct calls -- it will not support ACBX calls with multiple buffers; you should use the multifetch feature instead. However, the prefetch feature still supports ACB interface direct calls.

4. At this time, system files do not support spanned records or the extended MU and PE field counts.

5. At this time, fields defined with the NB option must also be defined with either the NU or NC option.

6. The following restrictions and limitations apply to spanned records in this release:

   - The ADAULD utility does not support spanned records on ADAULD SAVETAPE runs.

   - At this time, ADAM files do not support spanned records.

   - System files do not support spanned records at this time.

- The number of records that comprise a spanned record is limited. The Adabas nucleus allows up to five physical records (one primary record and four secondary records) in a spanned record. If you need more space, try relocating the Data Storage of the file to a different device type with a larger block size.

For more information about spanned record support in Adabas, read *Spanned Record Support*, in the *Adabas Concepts Manual*.

7. At this time, Adabas Review Pulse reports do not support ADARUN CLOGLAYOUT=8.

8. The following table lists restrictions and limitations of the Adabas utilities:

Utility	Restrictions or Limitations
ADACMP	At this time, LB fields cannot be specified in the FORMAT parameter for either ADACMP COMPRESS or ADACMP DECOMPRESS if the LOBVALUES parameter is set to YES.
ADACNV	ADACNV will not allow you to REVERT the database to Adabas 8.2 if any of the following apply: - The database contains a Security file in which a password is or was defined that applies to more than 191 files or relates to more security-by-value criteria than fit into a single data storage record. (This condition persists even if that password is deleted.) - The database contains a file in which a system field of type SECUID is defined. For information about reverting back to versions prior to Adabas 8.2, refer to the *Adabas 8.2 Release Notes*. To access a copy of these, read *Documentation and Other Online Information*, elsewhere in this guide.
ADALOD	The MIXDSDEV parameter is not supported in an ADALOD LOAD run if the file you are loading is a LOB file or may contain spanned records. You cannot use the DDISN or DELISN parameters in an ADALOD UPDATE function to delete records in a *LOB file*. Furthermore, you can only use these parameters to delete records in a *base file* of a *LOB group* if the records to be deleted contain no references to LOB values longer than 253 bytes which are stored in the LOB file. (ADALOD will terminate with an error if such a LOB value is encountered.)

9. BS2000 database communication can support a maximum of 32,767 buffers in the ABD list. Read *Adabas Buffer Descriptions (ABDs)*, in the *Adabas Command Reference Guide* for more information. ABD lists with more than 32,767 buffers will result in a response code 152.

8 Adabas Data Set Compatibility

Generally, Adabas utilities accept sequential input data sets that were produced as output data sets by utilities of the same version. Utilities of Adabas 8.5 also accept input data sets produced by utilities of versions prior to Adabas 8.5. However, utilities for versions prior to Adabas 8.5 cannot generally work with input data sets produced by Adabas 8.5 utilities.

Importing Files

A file cannot be imported (loaded, stored, or restored) into a database running with an earlier Adabas version if it uses features that are supported only in a later Adabas version.

Save Data Sets

Generally, restoring a whole database is possible only with the same Adabas release used for creating the save data set. Restoring individual files is possible with the same or any later Adabas release used for creating the save data set.

Using the ADASAV utility of Adabas 8.5, you can restore files into an Adabas 8.5 database from a database save or file save data set created with the ADASAV utility from any prior Adabas version. Likewise, using the ADAREP or ADAULD utilities of Adabas 8.5, you can print a report or unload a file from a database save or file save data set created with the ADASAV utility from any prior Adabas version.

However, you can only restore files from an Adabas 8.5 database save or file save data set into a database running with Adabas 8.4 if you have applied one of the following zaps to your Adabas 8.4 installation, as appropriate:

- For Adabas 8.4.3 installations, apply zap AU843020.
- For Adabas 8.4.2 installations, apply zap AU842022.
- For Adabas 8.4.1 installations, apply zap AU841037.

In addition, with the above zaps applied, it is possible to do a RESTONL FILE from an Adabas 8.5 database save with the corresponding PLOG created by Adabas 8.5 into a database running with Adabas 8.4.

Using the ADASAV utility of Adabas 8.5 for Delta SAVE MERGE, at least one DELTA save must be created by Adabas 8.5 for the MERGE to work correctly.

You cannot use an ADAREP or ADAULD utility from an Adabas version prior to Adabas 8.5 to print a report or unload a file from a save data set created by the ADASAV utility of Adabas 8.5.

Unload Data Sets

Using the ADALOD utility of Adabas 8.5, you can load a file from an unload data set created using the ADAULD or ADACMP utilities from any prior Adabas version.

Using the ADALOD utility of Adabas 8.4, you can load a file that was unloaded from an Adabas 8.5 database into a database running with Adabas 8.4 as long as the file does not use features supported only in version 8.5.

ADAORD DD/FILEA Data Sets

Using the ADAORD utility of Adabas 8.5, you can store files (STORE function) from a DD/FILEA data set created using the ADAORD REDB or REF functions from any prior Adabas version.

Using the ADAORD utility of Adabas 8.4, you can store files (STORE function) from a DD/FILEA data set created using the ADAORD REDB or REF functions in Adabas 8.5 into a database running with Adabas 8.4, as long as the files do not use features supported only in version 8.5.

Sequential Protection Logs

Any sequential protection log (PLOG) used for the ADACDC utility or ADARES COPY in Adabas 8.5 must have been created with Adabas 8.5. Generally, using a sequential PLOG created with an older Adabas version for utilities is fine as long as the PLOG was created with the following version or later:

Utility/Utility Function	PLOG created with or after
ADARES (BACKOUT/REGENERATE)	Version 7.2.
ADARES (REPAIR)	Version 7.1.
ADASAV, ADASEL, ADAULD	Version 5.2.
ADAPLP, ADARPL and ADAREP	No restrictions.

However, the PLOG written during an online save operation in a version prior to Adabas 8.5 may be used, together with the save data set, for an ADASAV RESTONL FILE or FMOVE operation in Adabas 8.5 (see *Save Data Sets*, earlier in this section).

9 Applying Zaps

⚠️ **Important:** Be sure that you apply all supplied Adabas maintenance and concatenate Adabas patch-level libraries (L00*n*), as they are delivered to you. This will ensure that your Adabas code remains up-to-date, supporting all Adabas features as they are enhanced and maintained. The latest zaps for this product are available in the Knowledge Center in Software AG's Empower (*https://empower.softwareag.com*) web site.

In general, zaps for Adabas components (such as Adabas nuclei, the Adabas router, Adabas utilities) can be applied and made active one component at a time.

If a zap requires that special steps be taken to apply and activate it, those steps will be described in the ACTION section of the zap.

- Adabas utility zaps should be applied to the load library. The utility can then be run or rerun to make use of the zap.

- Adabas nucleus zaps should first be applied to the load library. Then the nucleus should be stopped and restarted to activate the zap.

- Adabas router (on z/OS, ADASVC) zaps should first be applied to the load library. Then all Adabas nuclei and other MPM servers running on the router should be stopped and the router should be reinstalled to activate the zap. Finally, the Adabas nuclei and MPM servers should be restarted.

Finally, the distributed source library contains member ZAPOPT, which lists some optional zaps that you may choose to apply for the activation or deactivation of various features and optional user settings of Adabas. A ZAPOPT member will be included with each SM level distribution.

10 Software AG Mainframe Product Compatibility

The following table describes Adabas 8.5 compatibility with other Software AG mainframe products, including prior releases of Adabas itself. You may need to upgrade your installation of the software if your existing release is not listed. .

> **Note:** Any exceptions to the product compatibility described here will be covered in the documentation for the specific product.

Product	Compatible Version Levels and Notes
Adabas (ADA)	The version of the Adabas SVC or router (BS2000) used must be the same as or greater than the version of any Adabas database used in your Adabas environment. For example, the Adabas 8.5 SVC/router can be run in the same environment with Adabas 8.4 or 8.5 databases. However, an Adabas 8.5 database cannot run in the same environment with an Adabas 8.4 SVC/router. For any given database (on disk), the Adabas nucleus and utilities of the same version and release level as the database must be used. If you need to convert a database to a higher version or release level, or revert it to a lower version or release level, the ADACNV utility of the higher level must be used. The Adabas link (ADALNK) routines can be used across versions. For example, Adabas 8.5 link routines can be used to issue calls to Adabas 8.4 databases. Software AG recommends that you use the Adabas 8 link routines for all programs that issue Adabas direct calls.
Adabas Bridge for DL/I (ADL)	Version 2.3 SP2 supports Adabas 8.
Adabas Bridge for VSAM (AVB)	Version 5.1 SP1 releases on z/OS 2.1 support Adabas 8.5 databases that do not make use of the expanded features (for example, spanned records, increased limits, or large object fields) available since Adabas 8.3.
Adabas Caching Facility (ACF)	Version 8.5 supports Adabas 8.5 databases and requires the Adabas 8.5 load library, with appropriate Adabas 8.5 zaps applied.

Product	Compatible Version Levels and Notes
Adabas CICS Interface (ACI)	Version 8.5 supports Adabas 8.5 databases, with appropriate Adabas 8.5 zaps applied.
Adabas Cluster Services (ALS)	Version 8.5 supports Adabas 8.5 databases and requires the Adabas 8.5 load library, with appropriate Adabas 8.5 zaps applied.
Adabas Encryption (AEZ)	Version 8.5 supports Adabas 8.5 Encryption functionality and requires the Adabas 8.5 load library, with appropriate Adabas 8.5 zaps applied.
Adabas Delta Save Facility (ADE)	Version 8.5 supports Adabas 8.5 databases and requires the Adabas 8.5 load library, with appropriate Adabas 8.5 zaps applied.
Adabas Fastpath (AFP)	The minimum supported level of Adabas Fastpath is version 8.2 SP2. For more information, refer to *Using COR-based Add-ons.*.
Adabas IMS Interface (AII)	Version 8.5 supports Adabas 8.5 databases, with appropriate Adabas 8.5 zaps applied.
Adabas Native SQL (SQL)	Version 2.4 SP1 supports Adabas 8 databases that do not make use of the expanded features (for example, spanned records, increased limits, or large object fields) available in Adabas 8.
Adabas Online System (AOS)	Version 8.5 supports Adabas 8.5 databases, with appropriate Adabas 8.5 zaps applied.
Adabas Parallel Services (ASM)	Version 8.5 supports Adabas 8.5 databases and requires the Adabas 8.5 load library, with appropriate Adabas 8.5 zaps applied.
Adabas Review (REV)	Version 5.1 SP1 and above support Adabas 8.5. For more information, refer to your *Adabas Review* documentation.
Adabas SAF Security z/OS (AAF)	The minimum supported level of Adabas SAF Security is version 8.2 SP2. For more information, refer to *Using COR-based Add-ons*.
Adabas Statistics Facility (ASF)	Version 8 fully supports all Adabas databases 8.3 SP3 or above databases and expanded features.
Adabas SQL Gateway (ACE)	All currently supported versions of ACE support Adabas 8 databases. Please check the individual release notes for further information on which databases features are supported
Adabas System Coordinator (COR)	The minimum supported level of Adabas System Coordinator is version 8.2 SP2. For more information, refer to *Using COR-based Add-ons*.
Adabas Text Retrieval (TRS)	Version 2.1 SP4 works with Adabas 8.5 SP1 when the Adabas Text Retrieval 2.1 SP4 hyperdescriptor exit TRSHEX12 is enabled to run with the Version 8 interface by applying zaps TR21454 and TR21455. This hyperdescriptor exit will then only operate with Adabas Version 8. If you then want to run Adabas Text Retrieval 2.1 SP4 with an older Adabas version, you must either undo the zaps or use a copy of the hyperdescriptor exit where zaps TR21454 and TR21455 are not applied. If you do use TR21454 and TR21455, the following additional Adabas Text Retrieval fixes must be applied as prerequisite zaps: TR21420, TR21421, TR21422, TR21423 and TR21424. These zaps can be found in Empower. It is not necessary to use the Adabas Hyperdescriptor Exit Stub in conjunction with Adabas Text Retrieval.

Product	Compatible Version Levels and Notes
Adabas Transaction Manager (ATM)	The minimum supported level of Adabas Transaction Manager is version 8.2 SP2. For more information, refer to *Using COR-based Add-ons*.
Adabas Vista (AVI)	The minimum supported level of Adabas Vista is version 8.2 SP2. For more information, refer to *Using COR-based Add-ons*.
Data Archiving for Adabas (ADR)	Data Archiving for Adabas is compatible with all supported versions of Adabas in z/OS environments.
Entire Net-Work (WCP)	Version 6.3 and above fully support Adabas 8 databases and expanded features, as well as ACBX interface direct calls. **Note:** Using Point-to-point support for Adabas (ADATCP) requires Entire Net-Work Version 6.5 SP1 or above and Entire Net-Work TCP/IP Option Version 6.5 SP1 or above.
Entire System Server (NPR)	Entire System Server Version 3.5 and later versions fully support Adabas 8 databases and expanded features.
Event Replicator for Adabas (ARK)	Version 3.8 SP1 and above support Adabas 8.5. For more information, refer to your Event Replicator for Adabas documentation.
Natural (NAT)	Version 8.2 SP7 fully supports Adabas 8.5 databases and expanded features.
Predict (PRD)	Version 8.4 SP1 fully supports Adabas 8.5 databases and expanded features.
EntireX/webMethods EntireX (EXX)	All currently supported versions of EntireX support Adabas 8 databases. Please check the individual release notes for further information. **Note:** In order to work with the Adabas 8.5 SVC, certain EntireX fixes must be applied, depending on the EntireX version you are using. These are currently: EXX912L006, EXX910L015, EXX990L019 or EXX970L036. The latest product fixes are available under *Product Fixes* in the Knowledge Center in Software AG's Empower (*https://empower.softwareag.com*) web site.

11 Using COR-based Add-ons

This document describes using the Adabas COR-based Add-on products with Adabas 8.5. It covers the following topics:

Introduction

You can use the following Adabas COR-based Add-on products in conjunction with Adabas 8.5:

- Adabas System Coordinator (COR) 8.2 SP2 Patch Level 3 and above
- Adabas SAF Security (AAF) 8.2 SP2 Patch Level 2 and above
- Adabas Fastpath (AFP) 8.2 SP2
- Adabas Transaction Manager (ATM) 8.2 SP2
- Adabas Vista (AVI) 8.2 SP2

Implementation

≫ **Review the following information with regard to the implementation of the COR-based Add-on products with Adabas 8.5.**

1   We always recommend that the latest available maintenance is applied to each of the COR-based Add-on products in use at your site.

The table below defines the minimum required maintenance.

Add-on Product	Version	Minimum maintenance for the support of Adabas 8.5
Adabas System Coordinator	8.3 SP1	MI831009
	8.2 SP2 Patch Level 3	MI822189, MI822190, MI822191, MI822193, MI822204
Adabas Fastpath	8.2 SP2	AW822048
Adabas SAF Security	8.3 SP1	None required
	8.2 SP2 Patch Level 2	None required
Adabas Transaction Manager	8.2 SP2	AT822030
Adabas Vista	8.2 SP2	AV822055

2   Make sure the libraries for the relevant Adabas COR-based Add-on products are available to Adabas. Refer to the appropriate Add-on product installation documentation for the required library information.

> **Note:** It is no longer necessary for a COR*vrs*.LX*nn* special purpose library to be concatenated above the Adabas library for Adabas nuclei.

3   If you have applied maintenance that modifies the Adabas System Coordinator stubs (CORS*nn*) then relink your LNKGBLS modules to include the modified stubs. You will also need to relink any Adabas link modules that include a LNKGBLS module.

4   If, after loading the Adabas 8.5 INPL library, there is a requirement to (re)load the Adabas COR-based Add-on INPLs, (for example to apply an INPL update) then these INPL jobs should specify the **Check Date** option. This option loads the libraries in a date-sensitive manner by checking the dates of your existing INPL library and not allowing older members to replace members of the same name with newer dates. The use of the INPL Check Date option is determined by the following CMSYNIN command input (assuming the Natural input parameters in the job are specified in comma-delimited mode, or IM=D):

```
B,,,,,,,,Y
```

For reference, a sample INPL job CORI061 can be found in the JOBS library of the Adabas System Coordinator.

Required Adabas Maintenance

Fixes may be produced after the final freeze of the Adabas release. Depending upon timing some or all of these fixes may be supplied with the installation kit in an "all zaps" dataset (*Z000). These fixes, and any others that also appear in Empower, should be applied during the Adabas installation process. The following fixes are currently known to be required when using the Adabas COR-based Add-on products:

Adabas Version	Minimum maintenance for the support of Adabas COR-based Add-on products:
8.5 SP3	None
8.5 SP2	AN852023
8.5 SP1	None

12 AFPLOOK /AVILOOK Considerations

Note that the memory requirement of the database has increased by approximately 150K (above that required by Adabas 8.4) when running with ADARUN FASTPATH=YES or ADARUN VISTA=YES.

13 End of Maintenance

For information on how long a product is supported by Software AG, access Software AG's Empower web site at *https://empower.softwareag.com*.

Log into Empower. Once you have logged in, you can expand **Products** in the left menu of the web page and select **Product Version Availability** to access the Product Version Availability application. This application allows you to review support information for specific products and releases.

14 Documentation and Other Online Information

The following online resources are available for you to obtain up-to-date information about your Software AG products:

Software AG Documentation Website

You can find documentation for all Software AG products on the Software AG Documentation website at *https://documentation.softwareag.com*. This site requires Empower credentials. If you do not have an Empower user ID and password yet, you will find instructions for registering on this site (free for customers with maintenance contracts) or you can also use the TECHcommunity website to access the latest documentation.

Software AG TECHcommunity

You can find documentation and other technical information on the Software AG TECHcommunity website at *http://techcommunity.softwareag.com*. You can:

▪ Access product documentation, if you have TECHcommunity credentials. If you do not, you will need to register and specify "Documentation" as an area of interest. If you already have TECHcommunity credentials, you can adjust your areas of interest on the TECHcommunity website by editing your TECHcommunity profile. To access documentation in the TECHcommunity once you are logged in, select **Documentation** from the **Communities** menu.

▪ Access articles, 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.

Software AG Empower Product Support Website

You can find product information on the Software AG Empower Product Support website at *https://empower.softwareag.com*. This site requires Empower credentials. If you do not have an Empower user ID and password yet, you will find instructions for registering on this site (free for customers with maintenance contracts).

To submit feature/enhancement requests, get information about product availability, and download products and certified samples, select **Products & Documentation** from the menu once you are logged in.

To get information about fixes and to read early warnings, technical papers, and knowledge base articles, select **Knowledge Center** from the menu once you are logged in.

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