Adabas Cluster Services

Release Notes

Version 8.6.1

April 2020

ADABAS & NATURAL

This document applies to Adabas Cluster Services Version 8.6.1 and all subsequent releases.

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

Copyright © 2020 Software GmbH, Darmstadt, Germany and/or its subsidiaries and/or its affiliates and/or their licensors.

The name Software AG and all Software GmbH product names are either trademarks or registered trademarks of Software GmbH and/or its subsidiaries and/or its affiliates and/or their licensors. Other company and product names mentioned herein may be trademarks of their respective owners.

Detailed information on trademarks and patents owned by Software GmbH and/or its subsidiaries is located at https://softwareag.com/licenses.

Use of this software is subject to adherence to Software GmbH's licensing conditions and terms. These terms are part of the product documentation, located at https://softwareag.com/licenses and/or in the root installation directory of the licensed product(s).

This software may include portions of third-party products. For third-party copyright notices, license terms, additional rights or restrictions, please refer to "License Texts, Copyright Notices and Disclaimers of Third-Party Products". For certain specific third-party license restrictions, please refer to section E of the Legal Notices available under "License Terms and Conditions for Use of Software GmbH Products / Copyright and Trademark Notices of Software GmbH Products". These documents are part of the product documentation, located at https://softwareag.com/licenses and/or in the root installation directory of the licensed product(s).

Use, reproduction, transfer, publication or disclosure is prohibited except as specifically provided for in your License Agreement with Software GmbH.

Document ID: ALS-AALSRELNOTES-861-20251030

Table of Contents

1 Release Notes 1
2 About this Documentation 3
    Document Conventions 4
    Online Information and Support 4
    Data Protection 5
3 Adabas Cluster Services 8.6 Enhancements 7
4 Adabas Product Support 9
5 Restricted Support for Adabas Features 13
6 Migrating from Prior Versions 15
7 Zap Information 17
    Adabas Zaps on Empower 18
    Applying Zaps to Adabas Cluster Services Components 18
8 End of Maintenance 19
9 Documentation and Other Online Information 21
    Documentation Website 22
    TECHcommunity 22
    Empower Product Support Website 22
Index 23

1 Release Notes

This document provides detailed information on Adabas Cluster Services version 8.6 and describes the updates and modifications of this version. For information regarding Software GmbH product compatibility with IBM platforms and any IBM requirements for Software GmbH products, please review the *Product Compatibility for IBM Platforms* web page.

This document provides release notes for the Adabas Cluster Services 8.6 release.

Enhancements	Describes the new and changed features in Adabas Cluster Services 8.6.
Adabas Product Support	Describes Adabas Cluster Services support of Adabas add-ons and other Adabas products.
Restricted Support for Adabas Features	Describes any restrictions on Adabas Cluster Services support of Adabas features.
Migrating from Prior Versions	Describes how to migrate from prior versions of Adabas Cluster Services.
Zap Information	Describes information about Adabas Cluster Services zaps.
End of Maintenance	Describes how you can determine the end-of-support dates for Software GmbH technology products.
Documentation and Other Online Information	Describes the documentation and other online information you can obtain about this release of Adabas Cluster Services.

2 About this Documentation

- Document Conventions 4
- Online Information and Support 4
- Data Protection 5

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**.

Product Training

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

Tech Community

You can collaborate with Software GmbH experts on our Tech Community website at **https://techcommunity.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 GmbH 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 GmbH resources.

Product Support

Support for Software GmbH 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 Adabas Cluster Services 8.6 Enhancements

Maintenance updates have been applied.

4 Adabas Product Support

In general, Adabas Cluster Services version 8.6 supports or is supported by the same add-on products as Adabas 8.6. The following table describes Adabas compatibility with other Adabas products, including prior releases of Adabas itself. You may need to upgrade your installation of the software if your existing release is not listed.

Product	Compatible Version Levels and Notes
Adabas (ADA)	The version of the Adabas SVC used must be the same as or greater than the version of any Adabas database used in your Adabas environment. For example, the Adabas 8.6 SVC can be run in the same environment with Adabas 8.5 databases. However, an Adabas 8.6 database cannot run in the same environment as an Adabas 8.5 SVC. 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 8.6 link routines can be used to issue calls to Adabas 8.5 databasesWe recommend that you use the Adabas 8.6 link routines for all programs that issue Adabas direct calls.
Adabas Auditing (ALA)	ALA Version 2.3 SM1 or higher is required for Adabas 8.6 support.
Adabas Bridge for DL/I (ADL)	Version 2.3 SP2 supports Adabas 8.6.
Adabas Bridge for VSAM (AVB)	Version 5.1 SP1 supports Adabas 8.6 databases that do not make use of the expanded features (for example, spanned records, increased limits, or large object fields).
Adabas Caching Facility (ACF)	Version 8.6 supports Adabas 8.6 databases. Modules are supplied on the Adabas 8.6 load library. An Add-on license is required for enabling ACF.
Adabas CICS Interface (ACI)	Version 8.6 supports Adabas 8.6 databases. Modules are supplied on the Adabas CICS (ACI) 8.6 load library.

Product	Compatible Version Levels and Notes
Adabas Cluster Services (ALS)	Version 8.6 supports Adabas 8.6 databases. Modules are supplied on the Adabas 8.6 load library. An add-on license is required for enabling ALS.
Adabas Encryption (AEZ)	Version 8.6 supports Adabas 8.6 Encryption functionality. Modules are supplied on the Adabas 8.6 load library. An add-on license is required for enabling AEZ.
Adabas Delta Save Facility (ADE)	Version 8.6 supports Adabas 8.6 databases. Modules are supplied on the Adabas 8.6 load library. An add-on license is required for enabling ADE.
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*, in the *Adabas Release Notes*.
Adabas IMS Interface (AII)	Version 8.6 supports Adabas 8.6 databases. Modules are supplied on the Adabas IMS (AII) 8.6 load library.
Adabas Native SQL (SQL)	Version 2.4 SP1 supports Adabas 8.6 databases that do not make use of the expanded features (for example, spanned records, increased limits, or large object fields).
Adabas Online System (AOS)	Version 8.6 supports Adabas 8.6 databases. Modules are supplied on the Adabas 8.6 load library. An add-on license is required for enabling AOS.
Adabas Parallel Services (ASM)	Version 8.6 supports Adabas 8.6 databases. Modules are supplied on the Adabas 8.6 load library. An Add-on license is required for enabling ASM.
Adabas Review (REV)	Version 5.2 SP2 and above support Adabas 8.6. For more information, refer to your *Adabas Review* documentation.
Adabas SAF Security (AAF)	The minimum supported level of Adabas SAF Security is version 8.4 SP1. For more information, refer to *Using COR-based Add-ons*, in the *Adabas Release Notes*.
Adabas Statistics Facility (ASF)	Version 8.1 SP1 fully supports Adabas databases 8.6.
Adabas SQL Gateway (ACE)	All currently supported versions of ACE support Adabas 8.6 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 8.3 SP1. For more information, refer to *Using COR-based Add-ons*, in the *Adabas Release Notes*.
Adabas Text Retrieval (TRS)	Version 2.1 SP4 works with Adabas 8.6 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. 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*, in the *Adabas Release Notes*.
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*, in the *Adabas Release Notes*.
Entire Net-Work (WCP)	Version 6.6 and above fully support Adabas 8.6 databases, as well as ACBX interface direct calls. **Note:** Using Point-to-point support for Adabas (ADATCP) requires Entire Net-Work Version 6.6 SP1 or above and Entire Net-Work TCP/IP Option Version 6.6 SP1 or above.
Entire System Server (NPR)	Entire System Server Version 3.7 and later versions fully support Adabas 8.6 databases.
Event Replicator for Adabas (ARF)	ARF Version 4.2 SM1 or higher is required for Adabas 8.6 support.
Event Replicator for Adabas (ARK)	Version 4.2 SP1 and above support Adabas 8.6. For more information, refer to your Event Replicator for Adabas documentation.
Natural (NAT)	Version 9.2 fully supports Adabas 8.6 databases.
Predict (PRD)	Version 8.5 SP2 fully supports Adabas 8.6 databases.
EntireX/webMethods EntireX (EXX)	All currently supported versions of EntireX support Adabas 8.6 databases. Please check the individual release notes for further information.

5 Restricted Support for Adabas Features

This section describes facilities of Adabas that are not supported by cluster nuclei running under this Adabas Cluster Services or Adabas Parallel Services version. The facilities are supported normally for noncluster nuclei; however, no Adabas Cluster Services or Adabas Parallel Services functionality is available to them.

For an Adabas nucleus running in cluster mode (CLUSTER=LOCAL or SYSPLEX), the following features are not available and cannot be specified:

- `MODE=SINGLE`
- sequential protection log (DDSIBA)
- synchronous buffer flush (LFIOP=0)

The following features are not currently supported by nuclei running in cluster mode under this Adabas Cluster Services or Adabas Parallel Services version, but may be supported in subsequent versions of the product:

- `READONLY=YES` (receives PARM ERROR 71 if attempted).
- `UTIONLY=YES` can be specified for a cluster nucleus; if you start cluster nuclei with conflicting settings of `UTIONLY`, the system will change them to conform to the setting of the first active nucleus. Currently, however, the `UTIONLY` setting cannot be changed using an ADADBS OPERCOM or Adabas Online System function. Once the cluster is started, the only way to change the `UTIONLY` setting is to bring down the whole cluster and restart it with a different setting.
- online reorder.

Enhanced error recovery is supported; however, option changes are effective only for the local nucleus.

TCP/IP direct links are supported; however, the IP address/port is tied to an individual nucleus.

6 Migrating from Prior Versions

To migrate from your current Adabas Cluster Services version to Adabas Cluster Services 8.6, complete the following steps:

1. Shut down all nuclei in the cluster and the ADACOM subtasks for the (SVC) / DBID set. Run Adabas ADARES PLCOPY and ADASAV SAVE utility operations as necessary for your installation. For more information on these utility functions, refer to your Adabas documentation.
2. Replace the load library in your existing installation with the library supplied by Software AG containing the Adabas 8.6 SP1 (ADA861.LOAD) data set. Apply the zaps delivered with Adabas 8.6 SP1.
3. Install the Adabas 8.6 SP1 SVC if you have not already done so.
4. Run the ADACNV utility with TOVERS=86 to convert the database to version 8.6 format. For more information about the ADACNV utility, refer to the *Adabas Utilities Manual*.
5. Restart the nuclei in the cluster.

Migrating to Higher Service Pack (SP) Levels Later

To migrate from one SP level of Adabas Cluster Services 8.6 to a higher SP level (after SP1), it will usually be possible to shut down the affected components (Adabas nuclei, ADACOM task, Adabas SVC) on one system at a time, upgrade them to the higher SP level, and to bring them up again, on one system after the other, without ever shutting down the entire cluster.

Should that not be possible for a particular new SP level, it will be clearly indicated in the release notes for that SP level and instructions will be given on how to upgrade and activate the new SP level properly.

7 Zap Information

- Adabas Zaps on Empower 18
- Applying Zaps to Adabas Cluster Services Components 18

This chapter covers the following topics related to zaps and your use of Adabas Cluster Services:

Adabas Zaps on Empower

Please be sure to check the Knowledge Center in Software GmbH's Empower (*https://empower.softwareag.com*) web site for any cluster-related Adabas zaps (AP*vrsnnn*) when you install Adabas Cluster Services.

Applying Zaps to Adabas Cluster Services Components

Usually, zaps for components of Adabas Cluster Services (Adabas nuclei, the SVCCLU component of the Adabas SVC, the ADACOM task) can be applied and made active one component at a time. That is, individual components can be shut down, have the zap applied, and be brought up again without ever shutting down the entire cluster. This is the default method of applying zaps, which is in effect if the zap description does not explicitly state otherwise.

In some cases, it may be possible that applying and activating a zap one component at a time would introduce erroneous behavior in the components that have not yet been zapped. If this is the case for a zap, it will be clearly indicated in the zap description, and instructions will be given for how to apply and activate the zap properly.

8 End of Maintenance

For information on how long a product is supported by Software GmbH, access Software GmbH'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.

9 Documentation and Other Online Information

- Documentation Website 22
- TECHcommunity 22
- Empower Product Support Website 22

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

Documentation Website

You can find documentation for all Software GmbH products on the Documentation website at *https://documentation.softwareag.com*.

TECHcommunity

You can find documentation and other technical information on the 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 GmbH professionals, to ask questions, discuss best practices, and learn how other customers are using Software GmbH technology.
- Link to external websites that discuss open standards and web technology.

Empower Product Support Website

You can find product information on the 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.

Index

A

Adabas
    add-on product support, 9
    product support, 9
    restricted support for features, 13
add-on product support, 9

D

dates, end-of-maintenance, 19
documentation
    in TECHcommunity website, 22
    obtaining updates, 21
    on Documentation website, 22
Documentation website
    documentation, 22

E

Empower, 18
    Adabas zaps, 18
    end-of-maintenance dates, 19
Empower website
    product support, 22
end-of-maintenance dates, 19
enhancements, 7

M

migrating from prior version, 15

P

prior versions, 15
product support
    end-of-maintenance dates, 19
    obtaining in Empower, 22
    obtaining updated documentation, 21

R

restricted support, 13

S

support
    end-of-maintenance dates, 19
    obtaining updated documentation, 21
support dates, 19
support for prior versions, 19

T

TECHcommunity website, 22

Z

zap information, 17
zaps
    applying to Adabas Cluster Services components, 18
zps
    Adabas, 18