

Adabas for Linux, UNIX and Windows

Adabas Version 7.0.1 Release Notes

Version 7.0.1

October 2022

This document applies to Adabas for Linux, UNIX and Windows Version 7.0.1 and all subsequent releases.

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

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Document ID: ADAOS-RELNOTES-701-20220622

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1 Adabas Version 7.0.1 Release Notes

This document gives an overview of the features of Adabas Version 7.0.1 that have been introduced or modified since the previous release (Version 7.0). It also describes how to convert to and from previous database versions, e.g., versions 6.3, 6.4, 6.5, 6.6, 6.7, 6.7.1 and 7.0.

The document contains the following sections:

- **General Information**
- **New, Modified and Dropped Features**
- **Limitations and Restrictions**
- **Converting a Database from a previous Version to and from Version 7.0**
- **End of Maintenance**
- **Documentation and Other Online Information**

2 About this Documentation

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Document Conventions

Convention	Description
Bold	Identifies elements on a screen.
Monospace font	Identifies service names and locations in the format <i>folder.subfolder.service</i> , APIs, Java classes, methods, properties.
<i>Italic</i>	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.

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General Information

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This chapter provides information which you should be aware of before you install and use Adabas Version 7.0.1

Supported Operating Systems

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.

Installation

System Requirements

The system requirements for the current version of Adabas are contained in the installation documentation *System Requirements* (for UNIX platforms) and *System Requirements* (for Windows platforms).

Compatibility with Previous Versions

If you are upgrading from an earlier version of Adabas to Version 7.0.1, you should first read the release notes of any intermediate or skipped versions in order to find out about any compatibility issues that might exist.

Support for Adabas Version 7.0.1

Adabas Version 7.0.1 is the official replacement for Adabas Version 7.0. Details of when support for earlier versions will cease can be found in Empower.

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New, Modified and Dropped Features

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This chapter describes the new and modified features in Adabas Version 7.0.1

New Features

SSL Trusted Relationship for Natural

Natural can now use the Role Based Access Control (RBAC) facility of Adabas without providing user credentials or using the user exit 21. Instead, Natural must provide SSL certificates. A detailed description can be found in chapter *Adabas Security Feature: SSL Trusted Relationship for Natural*.

Utility Enhancements

The utilities *ADAMON*, *ADAOPR*, *ADAREP* and *ADATST* have been enhanced to access a database using facilities provided by *ADATCP/ADATCPS*.

A connection to a database (either local or remote) is established via protocol, hostname, and port number. The functionality of *ADAOPR* when using the connection string is limited to only display data of the database.



Note: Further *ADAOPR* functionality requires the classic communication via IPC.

Details on how to access a database via TCP/IP can be found in the *Utilities Manual*.

Enhancements in Adabas Extended Operations

The utility *ADAINI*, provided to retrieve and modify configuration files, has been enhanced by the new command *verify*, which will replace abbreviated entries by their full names.

Modified Features

User Defined Timeout Values

The user defined timeouts are limited to a range between 20 seconds and 30 days. The Adabas nucleus will limit the timeouts to its minimum or maximum if they are set by the *OP* command (see *ISN Lower Limit* and *ISN Quantity*) and are out of the valid range.

Please note that this change might have an impact on your application.

Dropped Features

5 Limitations and Restrictions

Adabas RESTful server is not compatible with Entire Net-Work version 7.9 and above.

6 Converting a Database from a previous Version to Version

7.0.1 and vice versa

- Converting Databases from Versions 6.1 Through Version 6.7.1 to Version 7.0 or 7.0.1 18
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This section describes how to convert an existing database from one version to another.

When the Adabas Role-Based Security feature is enabled, proceed with the steps described in the section [Converting Databases with Adabas Role-Based Security](#).

The sections below describe a conversion of databases without the security feature:

Procedural Steps

The following procedural steps are highly recommended when converting a database:

1. Create a backup of your existing database.

Use the old version of *ADABCK* to backup the whole database.

2. Modify the security configuration files.
3. Convert the version of the database by performing the steps described below.
4. Validate the consistency of the database.

Use the *FIELD* and *INDEX* functions of the *ADAVFY* utility to validate the consistency of the database.

Converting Databases from Versions 6.1 Through Version 6.7.1 to Version 7.0 or 7.0.1

There is no conversion necessary when moving from Adabas 7.0 to 7.0.1.

Modify the Security Configuration Files (Version 6.6 and above)

The following settings in the security configuration file *adaauth.ini* are mandatory:

```
ACTION=YES  
MODE=ADABAS
```

Please refer to the section *Configuration of Adabas Role-Based Security* for further information on the file location and content.

Convert the Database Version

If you want to upgrade a database from Version 6.1 through Version 6.7.1 to Version 7.0 or 7.0.1, there are two options available to you:

1. Convert the data using either the utility *ADABCK* or *ADAORD*. This option requires that you
 - a. Create a new Version 7.0 database;
 - b. Unload the old database using *ADABCK DUMP* or *ADAORD EXPORT* with the utilities supplied for the old database version;
 - c. Load the new database using *ADABCK RESTORE* or *ADAORD IMPORT* with version 7.0 or 7.0.1 utilities;
2. Convert the data using the utility *ADACVT* of version 7.0 or 7.0.1. This utility converts an existing database in place.

The utilities *ADACVT*, *ADABCK* and *ADAORD* make the following modifications:

- The structure level in the General Control Block (GCB) is increased;
- The structure of the FDT is changed when a Version 6.1 database is converted;
- Databases are included in the *ADABAS.INI* file when a *DBxxx.INI* file exists;
- The AUTOSTART options in the *ADABAS.INI* file are adapted.

Converting Databases with a Version Prior to Version 6.1

If you want to convert a database from Version 3 or Version 5, you must first upgrade the database to any of the versions Version 6.1 through 6.7.1, as described in the Release Notes of the version-specific documentation, and then proceed as described above.

Converting Databases with Version 7.0 or 7.0.1 to a Previous Version

Two options are available to go back to a previous version. You can either convert a database in place to a previous version, or you can make a backup of the database and restore it to a different place. If the database was encrypted, you can only use the second method.

Converting a Database in Place

You can use the utility *ADACVT* to convert a database to a previous version. *ADACVT* converts the database in place to the selected target version (Version 6.3 through Version 6.7.1). A downgrade is not possible if features introduced with Version 7.0 or 7.0.1 were used.

Please bear in mind that *ADATCP* is available since Version 6.7.1. Going back to an older version might imply changes in your infrastructure if *ADATCP* is in use.

Alternative Method to convert from Version 7.0 or 7.0.1 to Version 6.7.1, 6.7, 6.6, 6.5, 6.4 or 6.3

It is also possible to convert a Version 7.0 or 7.0.1 database back to Version 6.3 through 6.7.1 using the utility *ADABCK*. This is done by restoring a backup made with *ADABCK* Version 7.0 or 7.0.1 with the utility *ADABCK* of the respective target version. Unless the database is restored from scratch, *ADABCK*'s version and the version of target database must coincide. However, this method is not applicable if features introduced with Version 7.0/7.0.1 and the target version (Version 6.7.1 or below) were used. A backup of an encrypted Version 7.0/7.0.1 database is restored to an older version without encryption.

Please bear in mind that *ADATCP* is available since Version 6.7.1. Going back to an older version might imply changes in your infrastructure if *ADATCP* is in use.

Collation Descriptors Created with ICU Version 5.4

Collation descriptors created with ICU Version 5.4 are not processed correctly with Adabas Versions 6.3 to 6.4. Therefore, after the conversion to the target version with *ADACVT*/*ADABCK*, it is necessary to perform an *ADAINV REINVERT* of the collation descriptors with the *ADAINV* of the target version.

Without the *REINVERT*, you may get unexpected errors or incorrect results when you try to access the collation descriptors.

Modify the Security Configuration Files

The following settings in the security configuration file *adaauth.ini* are mandatory:

```
ACTION=YES  
MODE=ADABAS
```

Please refer to the section *Configuration of Adabas Role-Based Security* for further information on the file location and content.

Converting Databases with Adabas Role-based Security

This section describes how to convert a database when the Adabas role-based security feature is enabled:

- Authentication for Adabas
- Authorization for Adabas

Procedural Steps

The procedure to convert a database with Adabas role-based security is:

1. Create a backup of your existing database, as described above;
2. If the database had been encrypted, delete it and restore it from the backup taken in step 1 with the option ENCRYPTION=NO;
3. Modify the security configuration files;
4. Create a backup of your existing security definitions;
5. Convert the database using ADACVT;
6. Load your security definitions;
7. Validate the consistency of the database, as described above.

Modify the Security Configuration Files

The following settings in the security configuration file *adaauth.ini* are mandatory:

```
ACTION= YES
MODE=ADABAS
```

Please refer to the section *Configuration of Adabas Role-Based Security* for further information on the file location and content.

Authentication

If the Authentication feature is enabled for your database, please contact your nearest Adabas support center for a detailed description on how to proceed.

Authorization

Perform the following steps if the Authorization for Adabas Utilities feature is enabled for your database:

MODE INI

- Save the security definitions that are stored in the security configuration file *adarbac.ini*;
- Use ADADBM RBAC_FILE to load the RBAC system file;
- Use ADACVT to convert the database;
- Use ADARBA to define your site-specific security definitions that are defined in the file *adarbac.ini*.

MODE ADABAS

- Save the security definitions that are stored in the RBAC system file;
- Use ADACVT to convert the database;
- Use ADARBA to define your site-specific security definitions.

Audit Trail

The location and layout of the audit trail log file created by Authentication has been modified, please refer to the *Audit* section of the document *Adabas Role-Based Security*.

7 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.

8 Documentation and Other Online Information

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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.