

Adabas Review 4.5 Release Notes

Adabas Review version 4.5, which is used with Adabas version 8.1.3 and above, adds a number of new features to enhance the product's usability.

Adabas Review monitors the performance of Adabas environments and the applications executing within them. You can use information retrieved about Adabas usage when tuning application programs to achieve maximum performance with minimal resources.

This document covers the following topics:

- Enhancements
 - Removed Functionality
 - Restrictions
 - Migration from Previous Versions
 - Plans for Future Versions
 - Supported Platforms
 - Software AG Product Support
 - Adabas Review Version Compatibility
 - Zaps Data Set
 - End of Maintenance
 - Documentation
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Enhancements

The following enhancements have been made in this release.

- Summary Record Enhancements
- History Report Display Enhancements
- SVC Display Enhancements
- BUFFER-SEGMENTS Parameter Changes
- Report Option Screen Changes
- SWITCH Command Updates
- New Fields

- Changed Fields
- Performance Improvements
- User Field Changes

Summary Record Enhancements

You can now write summary records to a sequential file. The summarized Summary records are written when a report is closed for one of the following reasons:

- The storage (MAXK parameter) specified for the report is exceeded and report wrapping is turned off (WRAP=N).
- A specified time interval is reached.
- The value of either the LIMIT parameter or the ENTRIES parameter is reached.

Each of these triggers causes the report to be stopped and summarized. A report will not summarize (and no data will be written) if one of the following conditions is true:

- The report is suspended. In this case, the report is placed on hold and any summarization will happen later when it is restarted.
- The report wraps because its storage allowance is exceeded and report wrapping is turned on (WRAP=Y).
- A specific command is executed that stops report summarization.

In addition, the layout of the summary record has been completely changed in this release. For complete information about the new summary record layout, read *Summary Record Layout*. For information about the summary file definition, read *Files Used by Adabas Review* and *Summary Logging Considerations*, in the Adabas Review installation guide appropriate for your operating system.

History Report Display Enhancements

You can now specify a time along with the date when you submit a request to view an history report. When you submit the request, a popup window appears prompting you for a date and time range for the history data report. If you specify no date or time range, all history data is presented. If you specify a date with no time, all history data for that day is presented.

SVC Display Enhancements

This release introduces multiple improvements in the SVC display and functionality in Adabas Review. This feature is not yet available for Adabas Review on BS2000 systems.

- You now no longer need to manually maintain a list of available SVCs. Adabas Review has been enhanced to maintain a list of active SVCs automatically for you. However, to make use of this functionality, you must be running Adabas 8.1.4 or later.
- The SV command is no longer supported in this release.

- In addition to listing the active SVCs in the system, you can determine the targets that make use of the SVC by selecting it. Targets can be Adabas nucleuses or other targets, such as an Entire Net-Work node.

Note:

At this time, the identifiers shown for some targets may not be valid unless the target is an Adabas nucleus.

- If a target is an Adabas nucleus, you can display session statistics for that nucleus by selecting a specific target.

For more information, read *Using the Adabas Availability Function*.

BUFFER-SEGMENTS Parameter Changes

The command log records between the Adabas nucleus and Adabas Review are passed over in a buffer pool area which is defined by the BUFFER-SEGMENTS parameter.

In hub mode, a buffer pool that is too small might result in lost records. To avoid a buffer pool shortage, the provided parameter is used as an initial size allocation, but if necessary this size will be increased dynamically, although the region size will be a limiting factor. To determine whether records are lost, we strongly recommend that you use User Exit 5 in hub mode in the Adabas nucleus session. For more information, read *Interface Calls*.

The size of each buffer segment specified by the INPUT statement's BUFFER-SEGMENTS parameter has now been increased from 128 bytes to 512 bytes. When a value for BUFFER-SEGMENTS is specified, the total storage indicated by the specification is split in half between 4K buffers and 32K buffers.

**Warning:**

This size change will influence the amount of storage needed by Adabas Review. You will probably need to increase the size of the region or partition.

This change might require a bigger region size in local mode.

In addition, two new INPUT statement parameters have been added as replacements for the BUFFER-SEGMENTS parameter. The BUFFER-SEGMENTS parameter is still valid in Adabas Review 4.5, but is ignored if the following new parameters are specified:

Note:

The BUFFER-SEGMENTS parameter will no longer be supported in a future release of Adabas Review. For this reason, it has been removed from the Edit Target screen, where it has been replaced with fields for the following new parameters.

Parameter	Description	Minimum Value	Default Value
BUFFERS-4K	The number of buffer pool entries that have a length of 4096 bytes or less. This parameter is usually specified along with the BUFFERS-32K parameter. If this parameter is not specified, any BUFFERS-32K parameter setting is ignored. If a value below the minimum value is specified for this parameter, the default is used.	124	256
BUFFERS-32K	The number of buffer pool entries that have a length of 4097 bytes or greater. This parameter is usually specified along with the BUFFERS-4K parameter. If this parameter is not specified, any BUFFERS-4K parameter setting is ignored. If a value below the minimum value is specified for this parameter, the default is used.	15	30

The interactions of these buffer parameters are varied:

- If all three buffer parameters (BUFFER-SEGMENTS, BUFFERS-32K, and BUFFERS-4K) are specified, the BUFFER-SEGMENTS parameter setting is ignored and the BUFFERS-32K and BUFFERS-4K parameter settings are used.
- If none of the buffer parameters are specified, a default of 256 4K buffers and 30 32K buffers are used.
- If only one of the BUFFERS-4K or BUFFERS-32K parameters are specified, the setting for the other is ignored and the setting (if any) of the BUFFER-SEGMENTS parameter is used.

The recommended setting of the appropriate BUFFERS* parameter depends on the command log record data sent to Adabas Review. If a report definition requires data in any Adabas buffer, such as the record buffer, the entire record buffer is sent to Adabas Review. This size can be limited by the ADARUN parameter REVLOGMAX.

If the value of the BUFFER-SEGMENTS parameter is used, a minimum of 2000 must be specified. If less is specified, 2000 is assumed. In addition, the value of the BUFFER-SEGMENTS parameter is converted into 4K and 32K buffers.

Note:

The settings of the buffer parameters are used to define the sizes of the buffer pools in local mode and in hub mode only when not using Trans-port. If your environment uses Trans-port, the buffer parameter settings are used only as starting points for the sizes of the buffer pools. On systems where Trans-port is used, the buffer pools will grow, as needed, until they use 90% of the available storage.

For complete information on these parameters of the INPUT statement, read *INPUT Statement*.

Report Option Screen Changes

The report option screen has been changed to show different options, depending on whether the report is a summary report or a detailed report. For complete information, read *Specifying Reporting Options*.

SWITCH Command Updates

The SWITCH (or SW) command syntax has been changed in this release. The new syntax allows you to switch summary log files (summary reports) in addition to command log files (detailed reports) during Adabas Review report processing. For complete information, read *SWITCH or SW Command*.

New Fields

A number of new fields have been added in this release. These fields that may be used when creating Adabas Review reports using the Edit Report (ER) command. The new fields are:

Field Name	Category	Field Length	Format	Description
ACCTINF2	OS	16	C	Accounting information about the user that issued the Adabas call for z/OS batch jobs. This field will contain the second value specified in the account field of the job card.
ACINAME	TP	8	C	The program name of the Adabas CICS link routine for the DCI interface: ADADCI.
CIDALPHA	CB	4	C	Corresponds to the alphanumeric value of the ACB field command ID. This field serves important functions, determined by the command, during command execution. For example, during a sequential read, the command ID is used to return the records to the user in the proper sequence. This field displays the value of the CID in alphanumeric format.
HOLDISN	NUC	2	B	The numbers of ISNs which are in HOLD status by the user at the time this command is executed. The number is obtained after the execution of this command.
JMREDATE	OS	10	C	The date (in YYYY-MM-DD format) when the batch job was entered in JES or from the job information macro.
LPARNAME	OS	8	C	The system LPAR or partition name (in z/OS or z/VSE environments) or the environment name from the job information macro (in BS2000 environments).
NATGRP	NAT	8	C	The current Natural security group to which the user belongs.
NATRPCID	NAT	16	C	The 16-byte alphanumeric value for the store clock value used as identification of the Natural RPC Server.
NATRPCCO	NAT	16	C	The 16-byte alphanumeric value of the conversation ID from the Natural RPC Server.

Field Name	Category	Field Length	Format	Description
OPSYSNAM	OS		C	The operating system name (SYSNAME) that is specified in the SYS1.PARMLIB and which will be obtained from the CVT (in z/OS environments) or the operating system name and version number (in BS2000 environments).
ROUETIME	OS	8	B	The amount of time between the time a command was issued by the application and the time it was queued in the Adabas command queue. For Adabas 8.1 and earlier, this field is expressed in seconds; for Adabas 8.2 and later releases, this field is expressed in milliseconds.
TRUENAME	TP	8	C	The name of the Adabas CICS link routine TRUE exit.

For complete information on these fields, refer to their descriptions in the *Field Reference*.

Changed Fields

Several fields have been changed in this release. These fields that may be used when creating Adabas Review reports using the Edit Report (ER) command. The changed fields are:

Field Name	Category	Field Length	Format	Alternate Names	Description	What Changed?
CALLTYPE	CLOG	8	C	---	<p>Contains the type of the Adabas call that was issued. Possible values are:</p> <ul style="list-style-type: none"> ● "PHYSICAL": indicates a standard Adabas call ● "REMOTE": indicates a call arriving via Entire Net-Work. 	<p>This field used to support three different values: "PHYSICAL", "SPAT-BEF", and "SPAT-AFT". The values "SPAT-BEF" and "SPAT-AFT" were never used, so a new value was introduced: "REMOTE".</p> <p>Commands arriving via Entire Net-Work are displayed as "REMOTE"; all other calls are "PHYSICAL".</p>

Field Name	Category	Field Length	Format	Alternate Names	Description	What Changed?
CMDRESP	CB	4	B	CMDRSP MCR	<p>The time, in milliseconds, required to process the Adabas call. In the command table, Adabas Review stores the minimum Adabas duration for each command type returning a zero response code. The command table is updated whenever a lower duration value is encountered. Command response time is thus based on the command time field in the Adabas command log.</p> <p>The values for CMDRESP in the history file are automatically stored in seconds. To display them correctly, they must be converted to milliseconds. For more information on this conversion, read <i>Migration from Previous Versions</i> .</p> <p>If you need to continue using the old scale and the old calculation algorithm for history data, contact your Software AG support representative.</p> <p>Due to changes in the display programs in SYSREVDB, you cannot use SYSREVDB in Adabas Review 4.4 (or earlier versions) to display the field contents of CMDRESP correctly, unless you stay with the old scale and algorithm.</p>	<p>This field is now displayed in milliseconds instead of seconds. For example, a value of 0.000001 now displays as 0.001000.</p> <p>Due to internal changes, this value is now more accurate than in earlier Adabas Review releases, which can lead to different results. This is because the minimum value in Adabas Review 4.4 (or earlier versions) was 0.000001 seconds (one microsecond), with values less than one microsecond rounded up. With Adabas Review versions later than Adabas Review 4.4, values smaller than one microsecond are displayed correctly.</p> <p>These changes might make it necessary to adjust your environment factor. For complete information, read <i>ENV Statement in Using Batch Report Statements</i>.</p>

For complete information on these fields, refer to their descriptions in the *Field Reference*.

Performance Improvements

Due to changes of an internal algorithm in this release of Adabas Review, the CPU usage has decreased when summarizing a summary report. This applies in particular when using a large Max K parameter value.

User Field Changes

Several changes have been made in this release that affect user field definitions. Specifically, the structure of the Adabas Review internal command log record, LORECR, was changed in Adabas Review 4.4 and 4.5, so the user field definitions in Adabas Review 4.5 need to be modified to support these changes. . The following changes have been made:

- The command log extension (CLEX) is now included in the LORECR. So the CLEXOFF parameter is no longer necessary or available when defining Adabas Review user fields.
- You will need to adjust the settings of the OFFSET parameters in your user field definitions to account for the LORECR structural changes. For more information on the offset specifications, please contact your Software AG support representative.

For information on user field parameters and definitions, read *Defining Adabas Review User Fields*. For assistance in modifying your user field definitions for 4.5, contact your Software AG support representative.

Removed Functionality

The following functionality was removed in this release:

- Support for Adabas Review in z/VM environments is no longer provided, starting with the 4.5 release of Adabas Review.
- The SV command is no longer available in this release. Adabas Review has been enhanced to maintain a list of active SVCs automatically for you.
- The CLEXOFF parameter is no longer available when defining user fields.
- The LBP and LFPMXENT fields have been removed because the information they represent is no longer provided by the Adabas nucleus. Reports containing these fields are no longer executable, so the fields must be removed from the reports.

Restrictions

When an Adabas command log record in the new ACBX structure has multiple buffers specified, only the first buffer of each ABD type (for example, the first format buffer) is used by Adabas Review for building the contents of the Adabas Buffer Fields.

In z/VSE and BS2000 environments, the hub node ID cannot be greater than 255.

Migration from Previous Versions

The following migration steps should be considered and performed:

- Run the EXPAND3 job found in the Adabas Review source library to upgrade your version 4.4 (or 4.3) repository to a version 4.5 repository.
- If your site uses user field definitions, you will probably need to modify them to support architectural changes made to the internal command log record (LORECR). Contact your Software AG support representative for assistance.
- If an existing Adabas Review repository file is used with a new Natural FNAT file, the function REGEN ALL needs to be executed. For more information about REGEN ALL, read *Regenerating All Display Programs*.
- Any history file data from previous Adabas Review releases that includes the field CMDRESP must be converted for Adabas Review 4.5 before you run any new 4.5 reports. In version 4.5, the CMDRESP data is now stored in milliseconds rather than seconds. Software AG provides a conversion routine for you to use that can be run online or in batch. If you need to continue using the old units and the old calculation algorithm for history data, contact your Software AG support representative.

To convert the history data, you must either run the online CONVERT HISTORY command or run a batch job that performs the CONVHIST function. Each is described here.



Warning:

This conversion should only be run once against your existing history data; if it is run more than once, you run the risk of altering your older history data more than necessary, rendering it unusable. In addition, the conversion should be performed prior to running any new Adabas Review 4.5 reports; if you run it after you have run new reports, you run the risk of altering the data in your new reports unnecessarily.

The conversion routine will update every record in the history file where the CMDRESP value is stored. The time it takes for this program to run depends on the number of records for reports that contain the CMDRESP field. .



To convert your history data online:

1. On the Adabas Review Natural command line, enter CONVERT HISTORY.

A conversion dialog starts up.

2. Follow the prompts in the conversion dialog. One prompt requests the number of records that should be converted before an ET is performed (a default of 25 is provided).

When all prompts have been answered, the history records are converted and the final conversion dialog appears, showing its progress.

▶ **To convert your history data using a batch job:**

- Create a batch job that runs the CONVHIST command. The syntax of the CONVHIST batch command is:

```
CONVHIST [nnn | 25]
```

where *nnn* is the number of history records that should be converted before an ET is performed (and 25 is the default). The sample batch job might include the following statements:

```
LOGON SYSREVDDB
MENU DBID = review-dbid
CONVHIST
FIN
```

For complete information on running Adabas Review batch Natural jobs, read *Using Adabas Review in Batch Natural*. At this time, no sample conversion job is supplied with Adabas Review.

Plans for Future Versions

In a future version of Adabas Review, we will:

- remove support for the RVUAUT2 data set and will only support the use of the RVUAUT1 data set for autostarted reports.
- remove support for the BUFFER-SEGMENTS parameter.

Supported 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.

Note:

In z/VSE and BS2000 environments, the hub node ID cannot be greater than 255.

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** 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 this 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 products on 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 those described in the Product Version Availability screen as described above, consult Software AG technical support to determine whether support is possible, and under what circumstances.

Software AG Product Support

For more information about Adabas installation and prerequisites, read the various Adabas installation documents and the Adabas Operations Manual documentation.

- Adabas Version Requirements
- Natural Version Requirements
- Adabas Cluster and Parallel Services Requirements
- TP Monitor Support

Adabas Version Requirements

There are specific version requirements for Review in both local and hub mode. See *Adabas Review Version Compatibility*, elsewhere in this guide, for a detailed matrix of these version requirements.

Adabas Review version runs in three modes: local, batch, and hub.

- In local mode, Adabas Review runs in the Adabas address space.
- In batch mode, Adabas Review runs as a batch job.
- In hub mode, Adabas Review runs as a server in its own address space with a client interface in the Adabas address space.

Adabas Review in local mode requires Adabas version 8.1.3 or above and Adabas 8.1.4 LX01 (ADA814LX010). Running 4.5 in hub mode requires that the Adabas 8.1.4 or WAL 8.1.4 load library be concatenated with the Adabas Review 4.5.1 load library in the startup job. To be able to use all the new Adabas Review fields, the Adabas nucleus needs to run with the Adabas 8.1.4 LX01 (ADA814LX01)

library and the Adabas Review exits for ADALINK need to be installed. For more information, read *Adabas Review Version Compatibility*. The SVC should be version 8.1.2 or above and the databases being monitored can be version 7.1 or above.

Note:

▶ **On BS2000 platforms, we strongly recommend that you perform the following steps:**

1. Copy the existing ADA vrs .MOD library to a safe place.
2. Copy the contents of the Adabas 8.1.4 LX01 library into the ADA vrs .MOD library, replacing existing elements in the MOD library with the versions in the LX01 library.
3. On linking the ADALNK with the P.ADALNK job, replace the ADALNK with the generated ADALNK module in the ADA vrs .MOD library. This will not affect applications running using this ADALNK and will ensure that the Adabas Review data be transferred to the target collector.
4. Run all jobs on the system with the updated ADA vrs .MOD library.

Natural Version Requirements

This version of Adabas Review supports Natural version 4.2.4 and above.

Adabas Cluster and Parallel Services Requirements

This version of Adabas Review supports Adabas Cluster Services version 7.4 and Adabas Parallel Services 7.5 in hub mode.

TP Monitor Support

This version of Adabas Review supports the following TP monitors:

- Com-plete
- CICS
- IMS/DC
- TSO

Adabas Review Version Compatibility

This section provides information on the zaps required for compatibility of Adabas Review 4.5 (in both local and hub modes) with other versions of Adabas and Adabas SVC. Please note the following information when reviewing the compatibility matrices:

This section covers the following topics:

- Compatibility Matrix (Local Mode)

- Compatibility Matrix (Hub Mode)
- Batch Mode
- ADALINK REVEXITB
- CMDRESP Field Changes

Compatibility Matrix (Local Mode)

The matrix below provides an overview of the compatibility of Adabas Review in local mode with other versions of Adabas and Adabas SVC.

Adabas Review Version	Adabas Version	Status
4.5	7.4	Not compatible
4.5	8.1.3/8.1.4 (CLOGLAYOUT=5)	Not compatible
4.5	8.1.3 / 8.1.4 (CLOGLAYOUT=8)	Compatible only with ADA814LX01
4.5	8.2 (CLOGLAYOUT=5)	Not Compatible
4.5	8.2 (CLOGLAYOUT=8)	Compatible

Compatibility Matrix (Hub Mode)

Running Adabas Review 4.5 in hub mode with an Adabas 7.4 load library is not supported.

Hub Version	Adabas	SVC	Status
4.4	8.1.3 / 8.1.4	8.1	Compatible
4.4	8.1.3 / 8.1.4 with ADA814LX01	8.1	Compatible with zap RD441088
4.5	7.4	7.4	Not compatible
4.5	8.1.3 / 8.1.4	8.1	Compatible
4.5	8.2	8.2	Compatible

Note:

In z/VSE and BS2000 environments, the hub node ID cannot be greater than 255.

Batch Mode

In batch mode, the processor runs as a batch job that processes sequential Adabas command log data sets created either with command log layout 5 (CLOGLAYOUT=5) or command log layout 8 (CLOGLAYOUT=8).

ADALINK REVEXITB

The REVEXIT module provided in Adabas Review is upward compatible, but not downward compatible. This means that the REVEXIT module provided with Adabas Review 4.4 will work with Adabas 8.2 (although not all new 4.5 fields will be supported). However the REVEXIT module provided with Adabas Review 4.5 will not work with Adabas 8.1 or Adabas 7.4.

CMDRESP Field Changes

Due to changes in the display programs in SYSREVDB, you cannot use SYSREVDB in Adabas Review 4.4 (or earlier versions) to display the field contents of CMDRESP correctly, unless you stay with the old scale and algorithm. For information about converting CMDRESP history data from older versions of Adabas Review to Adabas Review 4.5, read *Migration from Previous Versions*.

Zaps Data Set

The distributed source library contains member ZAPOPT, which lists zaps that may be applied for the activation or deactivation of various features of Adabas Review. A ZAPOPT member will be included with each SM level distribution.

Important:

Be sure that you apply all supplied Adabas Review maintenance and concatenate Adabas Review patch-level libraries (L00n), as they are delivered to you. This will ensure that your Adabas Review code remains up-to-date, supporting all Adabas Review features as they are enhanced and maintained. The latest zaps for this product are available in the Knowledge Center of the Software AG Empower web site: <https://empower.softwareag.com>.

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.

Documentation

The documentation for this product is new with this release. If you have an Empower account, current, updated, and past versions of the documentation can be reviewed and downloaded by linking to the Software AG documentation, found on Software AG's Empower web site. 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).

The Adabas Review documentation includes:

- online HTML topics describing all aspects of the product;

- Adobe Acrobat Reader Portable Document Format (PDF) files created from the HTML topics;
- Adobe Acrobat Reader Portable Document Format (PDF) files for a series of manuals created from the HTML topics.

No hard-copy documentation is provided, although you can print the PDF and HTML files on your local printer.

Viewing Software AG Product Documentation under Windows XP SP2

With Service Pack 2 (SP2) for Windows XP and Service Pack 1 (SP1) for Server 2003, Microsoft introduced a range of powerful new security features that restrict active content that runs locally on your computer. Active content includes ActiveX controls, Java applets, and JavaScript. Software AG's documentation web pages contain some JavaScript, and the SEARCH, INDEX and CONTENTS capabilities are implemented as Java applets. As a result, when viewing documentation web pages that reside on your PC using Internet Explorer and Mozilla Firefox under Windows XP SP2, note that active content is blocked. You must explicitly and repeatedly allow active content if you want to make use of the documentation's full navigation features. Note that this behavior is only observed when reading web pages installed locally on your PC, including those on CD in the PC's CD-ROM drive.

The active content for which Software AG is responsible, that is, the JavaScript code in our HTML documentation pages, will not harm your computers. The risk in using the navigation applets is negligible: Software AG has received no reports from users concerning any harm caused to a computer by the applets. We therefore suggest that when reading Software AG documentation in a local context, you should allow active content via the Security settings in the browser (with Internet Explorer, usually found under Tools > Internet Options > Advanced).

Full details of alternatives can be found on the home page of the suppliers of the navigation applets: <http://www.phdcc.com/xpsp2.htm>.

Version Notation Convention

A product version is identified by the first two digits of the versioning number. Software AG distinguishes between major and minor versions according to the amount of functionality or technology added to the product. All other digits indicate correction levels.

In the product documentation, the notation *vrs*, *vr*, or simply *v* is often used as a placeholder for the current product version, for example, in data set or module names.

Placeholder	Meaning	Definition
v	version	<p>Major Version</p> <p>The first digit of the product version number indicates major architecture and functionality implementation or enhancement that adds value to the product.</p>
r	release	<p>Minor Version</p> <p>The second digit of the version number indicates functionality addition or enhancement that adds value to the product.</p>
s	system maintenance level	<p>Correction Level</p> <p>Correction levels contain error corrections only, without new functionality, including documentation of all modifications and repairs.</p> <p>In case it is necessary to include functional changes into a correction level, an exception handling process ensures that corresponding quality assurance activities are triggered. These functional changes are documented. The main target is to avoid impacts when you install such a correction level.</p> <p>The third number of an Adabas version denotes the system maintenance level.</p> <p>On certain platforms supported by Adabas, additional levels may exist, such as update package, patch level, service pack and hot fix.</p>