software AG

Adabas Review

Installation and Operations for BS2000

Version 4.6.2

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Adabas Review

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1 Preparing for the Installation

This section of the documentation provides installation preparation information for Adabas Review in BS2000 operating system environments.

The installation of Software AG products is performed by installation *jobs*, which are either created *manually* or generated by System Maintenance Aid (SMA).

For each step of the installation procedure described below, the job number of a job performing the respective task is indicated. This job number refers to an installation job generated by SMA. If you are not using SMA, a sample installation job of the same number is provided in the job library on the Natural installation tape; you must adapt this example job to your requirements.

For information about using Software AG's System Maintenance Aid (SMA) for the installation process, refer to the *System Maintenance Aid Manual* .

Prerequisites

Other prerequisites for Adabas Review are described in *Software AG Product Support and Requirements*, in the *Adabas Review Release Notes*.

Operating System Level

Before installing this version of Adabas Review, ensure that you are running a currently-supported version of BS2000 OSD. For information on the BS2000 OSD versions supported by this release of Adabas Review, 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 Roadmaps to access the Product Version Roadmaps application. This application allows you to review platform support information for specific Software AG products and releases.

TP Monitor Support

This version of Adabas Review requires one of the following TP monitors:

- TIAM
- UTM

About the Adabas Review Installation Tape

The Adabas Review installation tape is a standard label tape with the volume serial number REV*vrs*, where the notation *vrs* represents the version, revision, and SP level of the product.

- Copying the Installation Tape When Not Using SMA
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- Source Library Members

Copying the Installation Tape When Not Using SMA

Copy the files (data sets) from the supplied installation medium to your disk before you perform the individual installation procedure for each component to be installed.

The way you copy the files depends on the installation method and the medium used:

- If you use System Maintenance Aid (SMA), refer to the copy job instructions provided in the *System Maintenance Aid* documentation.

- If you are not using SMA and want to copy the files from CD-ROM, refer to the README.TXT file on the CD-ROM.

- If you are not using SMA and want to copy the files from tape, follow the instructions in this section.

This section explains how to copy all files from tape to disk.

- Step 1: Copy Library SRVvrs.LIB from Tape to Disk
- Step 2: Copy the Procedure COPY.PROC from Tape to Disk
- Step 3: Copy all Product Files from Tape to Disk

Step 1: Copy Library SRVvrs.LIB from Tape to Disk

This step is not necessary if you have already copied the library `SRV`*vrs*`.LIB` from another Software AG installation tape. For further information, refer to the element `#READ-ME` in this library. The library `SRV`*vrs*`.LIB` is stored on the tape as a sequential file named `SRV`*vrs*`.LIBS` containing LMS commands. The current version *vrs* can be obtained from the *Software AG Product Delivery Report*.

- Execute the following commands to convert `SRV`*vrs*`.LIBS` into an LMS library:

```
/IMPORT-FILE  SUPPORT=*TAPE(FILE-NAME=SRVvrs.LIBS,-
/   VOLUME=volser, DEV-TYPE=tape-device)
/ADD-FILE-LINK  LINK-NAME=EDTSAM, FILE-NAME=SRVvrs.LIBS,-
/   SUPPORT=*TAPE(FILE-SEQ=3), ACC-METH=*BY-CAT,-
/   BUF-LEN=*BY-CAT, REC-FORM=*BY-CAT, REC-SIZE=*BY-CAT
/START-EDT
@READ  '/'
@SYSTEM 'REMOVE-FILE-LINK  EDTSAM'
@SYSTEM 'EXPORT-FILE  FILE-NAME=SRVvrs.LIBS'
@WRITE  'SRVvrs.LIBS'
@HALT
/ASS-SYSDTA  SRVvrs.LIBS
/MOD-JOB-SW  ON=1
/START-PROG  $LMS
/MOD-JOB-SW  OFF=1
/ASS-SYSDTA  *PRIMARY
```

where:

tape-device is the device type of the tape, for example, TAPE-C4, and
volser is the VOLSER of the tape (see the *Software AG Product Delivery Report*).

Step 2: Copy the Procedure COPY.PROC from Tape to Disk

■ Call the procedure P.COPYTAPE in the library SRV*vrs*.LIB to copy the procedure COPY.PROC to disk:

```
/CALL-PROCEDURE  (SRVvrs.LIB,P.COPYTAPE), -
/   (VSNT=volser, DEVT=tape-device)
```

If you use a TAPE-C4 device, you can omit the parameter DEVT.

Step 3: Copy all Product Files from Tape to Disk

■ Enter the procedure COPY.PROC to copy all product files to disk:

```
/ENTER-PROCEDURE  COPY.PROC, DEVT=tape-device
```

If you use a TAPE-C4 device, you can omit the parameter DEVT.

The result of this procedure is written to the file L.REPORT.SRV.

Copying the Installation Tape Using SMA

If you are installing Adabas Review using the Software AG System Maintenance Aid (SMA), refer to the *System Maintenance Aid* documentation and to the information provided with the installation tape for specific installation instructions.

Installation Tape Contents

The installation tape contains the files listed below. The sequence of the files is shown in the *Software AG Product Delivery Report* delivered with the installation tape.

File Name	Contents
REV*vrs*.INPL	Adabas Review Natural objects
REV*vrs*.IUPD	Adabas Review Natural objects updates
REV*vrs*.MOD	Adabas Review module library
REV*vrs*.SRC	Adabas Review source modules and installation jobs
REV*vrs*.SYSF	Empty Adabas Review repository file
REV*vrs*.ZAPS	Zaps required for Adabas Review on this platform

> **Note:** Throughout this documentation, the notation *vrs* stands for the version, revision, and system maintenance level of the Adabas Review being installed.

Source Library Members

Source library members for Adabas Review are as follows:

> **Note:** Type "J" indicates a job member, "S" indicates a source member, and "M" indicates a macro member.

Member	Type	Description
ASMBS2	J	Sample job for macro assembly.
EXPAND	J	Sample job to upgrade an Adabas Review 3.4 SP4 repository to an Adabas Review 4.1 repository.
EXPAND1	J	Sample job to upgrade an Adabas Review 4.1 repository to an Adabas Review 4.2 repository.
EXPAND2	J	Sample job to upgrade an Adabas Review 4.2 repository to an Adabas Review 4.3 repository.
EXPAND3	J	Sample job to upgrade an Adabas Review 4.3 or 4.4 repository to an Adabas Review 4.5 SP1 repository.
EXPAND4	J	Sample job to upgrade an Adabas Review 4.5 SP1 repository to an Adabas Review 4.5 SP2 repository.

Member	Type	Description
EXPAND5	J	Sample job to upgrade an Adabas Review 4.5 SP2 repository to an Adabas Review 4.6 SP1 repository.
HUBJCL	J	Sample job to start the Adabas Review hub.
LOCAL	J	Sample job to start the Adabas Review in local mode.
P.ADALNK	J	Sample job to link the Adabas Review user exit with ADALNK.
P.GENERATE	J	Sample job to allocate and generate the files used by Adabas Review.
P.REVBATCH	J	Sample JCL to process a sequential command log by the batch component of Adabas Review.
REGEQU	M	Used by REVUEX5.
REVUEX1	S	Sample user exit 1 (User field exit) program.
REVUEX5	S	Sample user exit 5 program.
REVUXLOG	S	Sample Assembler source code for an Adabas Review command logging user exit.
REVUXSUM	S	Sample summary report user exit.
SAMPUEX5	S	Sample user exit 5
UEX5PARM	M	Used by REVUEX5.
WTO	M	Used by REVUEX5.
ZAPOPT	S	Contains optional zaps for installing Adabas Review.

Installation Overview

Adabas Review is installed in two phases:

1. Phase 1: Install non-TP-specific components. All steps in this phase are identical regardless of the TP monitor in use:

   ■ **Install Adabas Review under Natural;**

   ■ Install the Adabas Review repository;

   ■ Install Adabas Review under Adabas;

   ■ Install the Adabas Review hub (hub mode only);

   ■ Optional installation procedures.

2. Phase 2: Install TP-specific components. Separate procedures are used to install Adabas Review under each of the supported TP monitors: TIAM, batch, and UTM.

Phase one procedures are described in *Installation: Phase 1*, elsewhere in this guide; phase two procedures in *Installation: Phase 2*, elsewhere in this guide.

2 **Installation: Phase 1**

This section of the documentation provides installation procedures for Adabas Review in a BS2000 operating system environment. These procedures must be completed by all BS2000 sites installing Adabas Review.

- in local mode as an extension of ADALOG;

- in hub mode as a server in its own address space with client interface modules in the address space of all Adabas databases to be monitored.

> **Note:** Instructions for copying the tape contents to disk are provided in *About the Adabas Review Installation Tape*, elsewhere in this guide.

Install Adabas Review under Natural

To install Adabas Review under Natural, complete the following steps:

- Step 1. INPL Adabas Review
- Step 2. Modify the Natural Parameter File
- Step 3. Set ADACOM in the Natural Front-End Module
- Step 4. Bind ADAUSER and TMZLOD to the Natural Nucleus
- Step 5. Modify the Natural Startup Jobs to include DDLIB Link
- Step 6. Define Adabas Review to Natural Security, if applicable

Step 1. INPL Adabas Review

(JOB 1061, step 2600)

> **Note:** The entire Adabas Review application is stored in the SYSREVDB library. User profiles are stored in the SYSREVDU library.

INPL the Adabas Review programs and DDMs from the REV*vrs*.INPL file and subsequently from the REV*vrs*.IS*nn* or REV*vrs*.IUPD files, if supplied, to your Natural system file.

You can use any of your site-dependent Natural INPL JCL.

The Natural programs are copied into the SYSREVDB library in your FNAT file.

Step 2. Modify the Natural Parameter File

(Job I060 batch; Job I080 online)

▶ **To modify the Natural parameter file, complete the following steps:**

1   Include the minimum following parameter settings in the Natural parameter module that
    will be used when accessing Adabas Review:

```
CSTATIC=(...,ADATMZ,...)
LS=250
PS=80
MADIO=5000
MAXCL=0
ESIZE=64
NTWORK(7),AM=PC
```

NTWORK is a Natural macro used to define the work file(s) to be used; *AM* is the access
method. For more information, see the Natural documentation.

2   Include the following parameter in *all* your installation Natural parameter modules: (If this
    is not done, *no* data relating to Natural will be reported on.)

```
ADAPRM=ON
```

3   Add a Natural NTFILE definition for the physical database ID and file number of the Adabas
    Review repository file as follows:

```
NTFILE 241,dbid,fnr
```

Replace *dbid* and *fnr* with the database ID and file number, respectively, of the Adabas Review
repository.

> **Note:** The Adabas Review repository may not reside on a database with a database ID
> (DBID) of 255. If the database ID is 255, Adabas Review cannot be accessed in local or
> hub mode. However, a database with a DBID of 255 can send data to a hub.

4   Reassemble and link the *NATPARM* module to your Natural nucleus.

Step 3. Set ADACOM in the Natural Front-End Module

Set the Natural front-end module, NATFRONT, with the macro element:

```
ADACOM=ADABAS
```

Step 4. Bind ADAUSER and TMZLOD to the Natural Nucleus

Remove the binding of ADALNK and SSFB2C from the Natural nucleus.

Add the elements ADAUSER and TMZLOD to the Natural nucleus with the binder:

```
//       INCLUDE-MODULES  ELEMENT = (ADAUSER,TMZLOD), -
//          LIBRARY = $SAG.ADAvrs.MOD
```

or with TSOSLNK:

```
INCLUDE ADAUSER,$SAG,ADAvrs.LOD
 INCLUDE TMZLOD,$SAG,ADAvrs.LOD
```

Step 5. Modify the Natural Startup Jobs to include DDLIB Link

To load the necessary Adabas modules, the DDLIB link name needs to be set to the Adabas module library as follows:

```
/SET-FILE-LINK DDLIB,$SAG.ADAvrs.MOD
```

Step 6. Define Adabas Review to Natural Security, if applicable

▶ **If Natural Security is installed, complete the following steps:**

1   Define the SYSREVDB library for the Adabas Review system and the SYSREVDU library for the Adabas Review user profiles to Natural Security.

   📄   **Note:** If the Adabas Review application SYSREVDB is made private (i.e., the parameter People-protected=Y is specified), each user of Adabas Review must be linked to the SYSREVDB application.

2   Define Adabas Review Files to Natural Security as public DDMs:

```
REVIEW-ADABAS-Vvrs-CLOG
REVIEW-FNAT
REVIEW-ADABAS-Vvrs-SYSTEM
```

where *vrs* is the new Adabas Review version, release and SM.

Install the Adabas Review Repository

(JOB I050, step 2600)

This procedure applies to both local and hub mode installations.

The Adabas Review repository is a system file used for storing user profiles and descriptions of interactive reports, target definitions, and for saving historical data accumulated by Adabas Review reports. Any file may be used to contain the Adabas Review repository. The corresponding file number should also be reflected in the NATPARMs used to invoke Adabas Review.

Hub mode only: The Adabas Review repository can be created on any database accessible to Natural. It does not need to be on a database that is monitored by the Adabas Review hub.

This section includes the following substeps:

- Step 1. Modify the JCL for loading the Adabas Review repository
- Step 2. Load the Adabas Review repository file
- Step 3. Convert your repository and history file

⚠ **Important:** Users loading a new Adabas Review repository should run Steps 1 and 2 only and omit Step 3. Users converting the Adabas Review repository from a previous release should omit Steps 1 and 2 and run Step 3 only.

Step 1. Modify the JCL for loading the Adabas Review repository

Before submitting the job REVLOAD provided in the Adabas Review jobs library, change:

- the DBID=*dbid* parameter in the two ADARUN statements to reflect the DBID number of the database that will contain this file;

  📄 **Note:** The Adabas Review repository may not reside on a database with a database ID (DBID) of 255. If the database ID is 255, Adabas Review cannot be accessed in local or hub mode. However, a database with a DBID of 255 can send data to a hub.

- the ADALOD LOAD FILE=*fnr* statement to reflect the number of the file that will contain the Adabas Review file.

Step 2. Load the Adabas Review repository file

Load the Adabas Review repository file using the job REVLOAD modified in step 1.

Step 3. Convert your repository and history file

If you used the same repository file for a version of Adabas Review older than this release, Adabas Review requires that you convert your repository file and history data prior to running any new reports in this release of Adabas Review. For complete information on doing this, read *Migration from Previous Versions* , in the *Adabas Review Release Notes*.

Install Adabas Review under Adabas

To install Adabas Review under Adabas, complete the following steps:

- Step 1. Modify the Adabas Initialization Parameters
- Step 2. Modify the Adabas Review AUTO-START Generator Job
- Step 3. Modify the Adabas Startup JCL
- Step 4. Apply Adabas Zaps

Step 1. Modify the Adabas Initialization Parameters

Modify your existing Adabas ADARUN parameters to include the following (these ADARUN cards are generated by SMA):

For local mode only:

```
ADARUN REVIEW=LOCAL
```

For hub mode only:

The Adabas Review hub ID value is set using the ADARUN parameter REVIEW.

```
ADARUN REVIEW=hubid
ADARUN UEX5=user-exit
```

where *hubid* is the Adabas Review hub ID (version 4.2 and above support two-byte DBIDs) and UEX5 is optional as described in *REVUEX5: Adabas Review Hub Event Handler (Adabas Exit 5)* in the *Adabas Review Reference Guide*.

> **Notes:**

1. Adabas Review does not require you to log any of the Adabas buffers. You can select options when writing data in parallel to the CLOG.

2. In local mode, physical command logging can be suppressed by specifying the LOGGING=NO option on the Adabas Review INPUT statement or target definition for the file. The default value for the LOGGING parameter is LOGGING=NO.

Step 2. Modify the Adabas Review AUTO-START Generator Job

> **Note:** This step is not supported by the automated SMA installation.

The AUTO-START generator job is started automatically by Adabas Review when:

- the target definition for the relevant database changes;
- the AUTOSTART option in an existing report definition changes;
- a new report is defined with the option AUTOSTART=Y;
- the GENAUTO or GA command is entered by the user; or
- the GENCARD or GC command is entered by the user.

> **Note:** The AUTO-START generate process is a BS2000 subtask. This is a spawned task on BS2000. The output for this task is found in the files L.O.*tttt*.RAOSAUTO.*hex_timestamp* where:

tttt	is the task number of the Adabas Review nucleus or hub;
hex_timestamp	is the STCK value of the clock in hex when the subtask was spawned.

This section covers the following topics:

- Modify the P.GENERATE job
- About the Adabas Review History File Population Job

Modify the P.GENERATE job

The base P.GENERATE job is located in the REV*vrs*.SRC data set (file) and should be modified appropriately for your site.

Each database running with Adabas Review and the hub needs a set of files and jobs for itself. P.GENERATE generates the files described in the rest of this section to satisfy this need.

Data files:

```
prefix.REVvrs.RVUALT
prefix.REVIEW.RVUAUT1
prefix.REVIEW.RVUAUT2
prefix.REVIEW.RVUPARM
prefix.REVIEW.RVLOG01
prefix.REVIEW.RVLOG02
prefix.REVIEW.RVSUM01
prefix.REVIEW.RVSUM02
prefix.REVIEW.RVUALT.BACKUP
prefix.REVIEW.RVUFLD
prefix.REVIEW.RVUPRT00
prefix.REVIEW.RVUPRT01
prefix.REVIEW.RVUPRT02
prefix.REVIEW.RVUPRT03
prefix.REVIEW.RVUPRT04
prefix.REVIEW.RVUPRT05
prefix.REVIEW.RVUPRT06
prefix.REVIEW.RVUPRT07
prefix.REVIEW.RVUPRT08
prefix.REVIEW.RVUPRT09
prefix.REVIEW.RVUEXP
prefix.REVIEW.RVUEXI
prefix.REVIEW.RVUCARD
```

Editor copy files:

```
REVIEW.COPY.db
```

Call/enter procedures:

```
REVIEW.E.COPYLOG1.db
REVIEW.E.COPYLOG2.db
REVIEW.P.COPYALT.db
```

where:

Item	P.GENERATE Parameter	Description
	&ADAL	the name of the Adabas module library
db	&DB	Adabas Review database number (local or hub: 5 digits with leading zeros)
	&FUNC	<blank> - help information:
		CRE create files DEL delete files
	&IDTNAME	8-character IDT name where the Adabas Review database or hub is to run (must begin with "ADA").

Item	P.GENERATE Parameter	Description
	&LOGPFX	RVLOG. This is the prefix of the logging file.
	&LOGSIZE	If "0", it operates as in earlier versions and the log file will be continuously written to. If a value greater than zero (>0), a file with no secondary extent will be created. When this is full, the next RVLOG (*nn*+1) will be opened and written to.
prefix	&PREFIX	a prefix to the files for easy maintenance (in this documentation, the example prefix is DB099)
	&REPDB	database number (5 digits with leading zeros) of the Adabas Review repository file where the REV*vrs*.SYSF file was loaded.
REV*vrs*	&REV	the current Adabas Review version, revision, and system maintenance level
	&REVL	the name of the Adabas Review module library
	&SUMPFX	RVSUM. This is the prefix of the summary file.
	&SUMSIZE	If "0", it operates as in earlier versions and the summary file will be continuously written to. If a value greater than zero (>0), a file with no secondary extent will be created. When this is full, the next RVSUM (*nn*+1) will be opened and written to.
Note: Only two RVLOG and RVSUM files are included in this example procedure. More can be added (RVLOG03 or RVSUM03, for example) by copying and pasting the creation commands.		

About the Adabas Review History File Population Job

Adabas Review report definitions specify whether the data accumulated by the report is also written to the Adabas Review repository. The reports can then be viewed again or combined with previous occurrences of the same report to produce a combined summary report.

Because Adabas Review cannot write to the Adabas Review repository directly when running in local mode, it writes an intermediate history file either at intervals or at Adabas termination. At the next Adabas startup, Adabas Review reads the file with the link name RVUALT and populates its system file with history data.

> **Note:** The Adabas Review history file population process is a BS2000 subtask. This is a spawned task on BS2000. The output for this task is found in the files L.O.*tttt*.RAOSHIST.*hex_timestamp* where

tttt	is the task number of the Adabas Review nucleus or hub;
hex_timestamp	is the STCK value of the clock in hex when the subtask was spawned.

Step 3. Modify the Adabas Startup JCL

This section describes how to modify the Adabas local mode startup JCL and the hub mode client interface JCL.

- Modifying the local mode JCL
- Modifying the hub mode client interface JCL

Modifying the local mode JCL

An example Adabas Review local mode startup job is provided in REV*vrs*.SRC(LOCAL).

> **Note:** The example job LOCAL in the REV*vrs*.SRC library on BS2000 does not set the DBID parameter because we believe that setting a default DBID in this job might lead to problems in the setup of the environment. Instead, the DBID should be specified in the Natural area of Adabas Review for the default DBID in the user profile, or the Natural LFILE=(241,...) parameter. And for the Adabas Review hub database, the REVIEW parameter should set the hub DBID (or if is LOCAL, then it is its own DBID).

▶ **Modify the Adabas startup JCL as follows (these modifications are generated by SMA):**

1   Add the following step after the nucleus has been terminated to copy the RVUALT file to a backup file that is read by RAOSHIST:

```
/SET-JOB-STEP
/CALL-PROC REVIEW.P.COPYALT.db
```

where REVIEW.P.COPYALT.*db* was generated by P.GENERATE above.

2   Add the FILE/LINK statements required for Adabas Review. Use the file REVIEW.COPY.*db* that was generated by P.GENERATE above.

If for some reason you do not want to use the generated file, you can add the following cards to the deck instead:

```
/SET-FILE-LINK   RVUALT,DB099.REVIEW.RVUALT
/SET-FILE-LINK   RVUAUT1,DB099.REVIEW.RVUAUT1
/SET-FILE-LINK   RVUAUT2,DB099.REVIEW.RVUAUT2
/SET-FILE-LINK   RVUPARM,*DUMMY
/SET-FILE-LINK   RVLOG01,DB099.REVIEW.RVLOG01
/SET-FILE-LINK   RVLOG02,DB099.REVIEW.RVLOG02
/SET-FILE-LINK   RVSUM01,DB099.REVIEW.RVSUM01
/SET-FILE-LINK   RVSUM02,DB099.REVIEW.RVSUM02
/SET-FILE-LINK   RVUFLD,DB099.REVIEW.RVUFLD
/SET-FILE-LINK   RVUPRT00,DB099.REVIEW.RVUPRT00
/SET-FILE-LINK   RVUPRT01,DB099.REVIEW.RVUPRT01
/SET-FILE-LINK   RVUPRT02,DB099.REVIEW.RVUPRT02
/SET-FILE-LINK   RVUPRT03,DB099.REVIEW.RVUPRT03
```

```
/SET-FILE-LINK  RVUPRT04,DB099.REVIEW.RVUPRT04
/SET-FILE-LINK  RVUPRT05,DB099.REVIEW.RVUPRT05
/SET-FILE-LINK  RVUPRT06,DB099.REVIEW.RVUPRT06
/SET-FILE-LINK  RVUPRT07,DB099.REVIEW.RVUPRT07
/SET-FILE-LINK  RVUPRT08,DB099.REVIEW.RVUPRT08
/SET-FILE-LINK  RVUPRT09,DB099.REVIEW.RVUPRT09
/SET-FILE-LINK  RVUEXP,DB099.REVIEW.RVUEXP
/SET-FILE-LINK  RVUEXI,DB099.REVIEW.RVUEXI
/SET-FILE-LINK  RVUCARD,DB099.REVIEW.RVUCARD
```

Notes:

1. Use the supplied procedure REV *vrs*.SRC(P.GENERATE) to generate the required files for each database where Adabas Review (local or hub) is to be installed. Otherwise, I/O errors will be returned during Adabas Review initialization.

2. All databases that have Adabas Review (local or hub) installed must be assigned their own set of Adabas Review files.

3. *DB099* is the `&PREFIX` parameter of the P.GENERATE procedure above.

3   Set up a sequential file with the following contents:

```
ADALNK IDTNAME=idtname
```

where `idtname` is an 8-character IDT name where the Adabas Review is running, the same as in the ADARUN cards. The file *must* be a permanent file because it supplies routing and buffer information to the subtask.

Then set the following link card in the nucleus startup job:

```
/SET-FILE-LINK DDLNKPAR,ddlnkpar_file_name
```

where `ddlnkpar_file_name` is the file name of the permanent sequential file above.

4   Ensure that the REV *vrs*.MOD library is accessible from the executed ADARUN job by declaring the following BLSLIB card:

```
/START-PROGRAM (Adabas.MOD,ADARUN),RUN-MODE=ADV (ALT-LIB=YES)
```

Ensure that Adabas can access the Adabas Review default link name and alternative libraries as declared by BLSLIB above by including the following statement:

```
/SET-FILE-LINK DDLIB,ADAvrs.MOD
/SET-FILE-LINK REVLIB,REVvrs.MOD
/SET-FILE-LINK BLSLIB00,REVvrs.MOD
/SET-FILE-LINK BLSLIB01,ADAvrs.MOD
```

Modifying the hub mode client interface JCL

Repeat the following four substeps for each database to be monitored.

▶ **To modify the Adabas startup JCL for the hub mode client interface:**

1   Use the following BLSLIB structure:

```
/SET-FILE-LINK    DDLIB,Adabas.MOD
/SET-FILE-LINK    REVLIB,REVvrs.MOD
/SET-FILE-LINK    BLSLIB00,REVvrs.MOD
/SET-FILE-LINK    BLSLIB01,ADAvrs.MOD
```

2   Add a DDLOG or DDCLOGR1/DDCLOGR2 file.

This DDLOG FILE card *must* point to a physical output file and *must not* be coded as DUMMY and *not* be allocated as a temporary file.

> **Note:** If Adabas command logging (single or dual) is already being used, this portion of this step can be omitted.

3   Use the following to ensure that Adabas can access alternative libraries as declared by BLSLIB above:

```
START-PROGRAM (Adabas.MOD,ADARUN),RUN-MODE=ADV (ALT-LIB=YES)
```

4   Restart Adabas.

Step 4. Apply Adabas Zaps

Upgrade the Adabas Review module libraries with Adabas fixes.

Adapt the procedures BS2ZAP and ADA*vrs*.Z000 in REV*vrs*.ZAPS, then run ADA*vrs*.ZAPS where *vrs* is the version, revision, and system maintenance level of the Adabas Review being installed.

Install Adabas Review Zaps

Apply all the released Adabas Review zaps to the Adabas Review module library.

Install the Adabas Review Hub

Complete the steps in this section to install the Adabas Review hub.

- Step 1. Modify the Adabas Startup JCL (Hub Mode Server Database)
- Step 2. Start the Adabas Review Hub for the First Time

Step 1. Modify the Adabas Startup JCL (Hub Mode Server Database)

An example Adabas Review hub mode startup job is provided in REV*vrs*.SRC(HUBJCL).

> **Note:** The example job HUBJCL in the REV*vrs*.SRC library on BS2000 does not set the DBID parameter because we believe that setting a default DBID in this job might lead to problems in the setup of the environment. Instead, the REVIEW parameter should set the hub DBID for the hub database (or if is LOCAL, then it is its own DBID).

▶ **Modify the Adabas startup JCL as follows (these modifications are generated by SMA):**

1 Correct any library names or file names.

2 Modify the ADARUN parameter `REVIEW` to reflect the target DBID you will use for the Adabas Review hub.

3 Specify the ADARUN parameter `IDTNAME`, if necessary. This value must be the same as that used by the sending Adabas nuclei.

   The ADARUN parameters supplied in the sample JCL member HUBJCL are the only ones recognized for setting up the hub nucleus. For more information about these ADARUN parameters, read *ADARUN Parameters*, in the *Adabas Review Reference Guide*.

   Software AG recommends that you set the dispatching priority of the Adabas Review hub higher than that used by the sending Adabas nuclei.

4 Set up a sequential file with the following contents:

```
ADALNK IDTNAME=idtname
```

   where `idtname` is an 8-character IDT name where the Adabas Review is running, the same as in the ADARUN cards. The file *must* be a permanent file because it supplies routing and buffer information to the subtask.

Then set the following link card in the nucleus startup job

```
/SET-FILE-LINK DDLNKPAR,ddlnkpar_file_name
```

where *ddlnkpar_file_name* is the file name of the permanent sequential file above

Step 2. Start the Adabas Review Hub for the First Time

See the section *Starting Adabas Review*, elsewhere in this chapter.

Optional Installation Procedures

This section describes optional installation procedures

- Implement support for Adabas Native SQL

Implement support for Adabas Native SQL

From within Adabas Native SQL, use the global ADACALL statement with the LAST parameter to specify that the Adabas call will use the seventh parameter.

Refer to the Adabas Native SQL documentation.

3 Installation: Phase 2

REVEXITB for BS2000 is supplied in the module RDBLXBS2 for TIAM, batch, and UTM applications. This module should be linked to ADALNK, as described in the steps in this chapter. A sample job is provided in REV*vrs*.SRC(P.ADALNK).

> **Note:** If you elect to use the link routine ADALNKX, link the batch Adabas Review routine RDBLXBS2 and RDBLKIND to ADALNK ensuring that the symbols ADALNKDA, SSFB2C and ADAL2P are not hidden.

Step 1. Install REVEXITB for the Adabas Link Routines

> **Important:** If an ADALNK batch link routine has been modified to accommodate the needs of an Adabas product extension (such as Adabas Review), it should not be used for the Adabas nucleus or Adabas utility jobs.

▶ **If you use ADAUSER to load ADALNK, generate a file with the following structure:**

■
```
ADALNK IDTNAME=database_IDT
```

where `database_IDT` is the IDT name where the database being monitored by Adabas Review is registered.

Also, place the following statement in your job:

```
/SET-FILE-LINK DDLNKPAR,adalnk_file_name
```

▶ **If you use ADARUN to load ADALNK, add the following fields to the DDCARD file:**

■
```
ADARUN    PROG=USER,......IDTNAME=database_IDT
```

where `database_IDT` is the IDT name where the database being monitored by Adabas Review is registered.

Step 2. Set the Adabas Entry Name, if Necessary

If you have not already set the Adabas entry name, do so now.

In the NATFRONT(batch),NRTFRONT(TIAM) or NUTFRONT(UTM) source modules, set:

```
ADACOM=ADABAS
```

Then reassemble the appropriate source module.

Step 3. Ensure Access to Link Data in the NATPARM Module

In order for Adabas Review to retrieve link and target data, make sure that the NATPARM module contains:

```
CSTATIC=(...,ADATMZ,...)
```

Step 4. Link the Natural Front-End, if Necessary

(JOB I060) for batch; (JOB I080) for TIAM and UTM.

Step 5. Modify the Natural Startup Procedure, if Applicable

Modify your existing Natural startup procedure by including the following /SET-FILE-LINK statement pointing to the Adabas library where your ADALNK module is located:

```
/SET-FILE-LINK DDLIB,Adabas.MOD
```

Note: If you are *not* using a procedure, the above /SET-FILE-LINK statement must be supplied before calling Natural online.

4 Starting Adabas Review

This section of the documentation describes the procedures for setting up and using Adabas Review after the installation has been completed:

■ Initializing Adabas Review for the first time;

■ Accessing Adabas Review;

■ Verifying the Adabas Review installation.

Starting Adabas Review for the First Time

If this is the first time you have installed this version of Adabas Review, or you have loaded a new Adabas Review repository file, you must initialize:

■ the user profile subsystem, which allows you to give users access to Adabas Review; and

■ the Adabas Review data file, which designates a DBID for the Adabas Review repository, and installs the Adabas Review-supplied reports.

Initializing the Adabas Review User Profile Subsystem

▶ **To initialize the Adabas Review user profile subsystem**

1   Access Natural as you normally do.

2   At the NEXT prompt, log on to the library SYSREVDB.

> **Note:** Wherever the NEXT prompt is specified, the command can also be issued from the Natural main menu command line.

3   At the NEXT prompt, type `MENU` and press ENTER to display the main menu:

```
 08:49:56                 A D A B A S  -  R E V I E W          2011-03-17
                              Main Menu                         HUB=15690

                   Code               Description
                   ----       --------------------------------
                    AA           Available ADABAS Nuclei
                    AH           Available Review Hubs
                    AO           ADABAS Online System
                    ER           Edit Report Definition
                    ES           Edit Specialty Reports
                    ET           Edit Target Definition
                    LH           List History Reports
                    LR           List Report Definitions
                    LS           List Started Reports
                    LT           List Target Definitions
                    UP           User Profiles
                   ----       --------------------------------




 Command: _____
 Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
       Help        Exit                                            Fin    ↵
   ↵
```

When you enter MENU for the first time Adabas Review detects that the profiling system has not been installed and installs it automatically. In addition, it installs two profiles: one profile named DEFAULT and a profile with the same name as the user ID of the user initializing the system (the user who entered MENU). Both profiles have administrator privileges.

Initializing the Adabas Review Data File

> **Note:** If you are using a repository from version 4.3, omit this step.

▶ **To initialize the Adabas Review data file**

1   At the Adabas Review main menu command line, type INSTALL DB and press ENTER.

    The Initialization Process window appears:

```
13:04:45                  A D A B A S  -  R E V I E W                 2012-06-14
                                 Main Menu                             LOCL=56078

                      Code                    Description


                           Default Target Definition

                      Please enter the appropriate Version
                      FOR ADABAS DBID 56078:

                              ADABAS Version .. ___




                      ----     -------------------------------


 Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12-
       Help        Exit                                                    Fin
 Command: install db_____
```

2   Confirm or cancel the initialization.

     You are prompted to confirm the DBID and FNR of the Adabas Review repository. If the
     DBID or FNR are not correct, you may cancel the initialization.

     ▪ To confirm the initialization, enter YES at the prompt.

     ▪ To cancel the initialization, press ENTER.

     If the initialization is confirmed, the Default Target Definition screen appears.

```
15:46:47              A D A B A S  -  R E V I E W            2011-03-17
                              Main Menu                       LOCL=00222

            +----------------------------------------------+
            +----------------------------------------------+
            |          Default Target Definition           |
            |                                              |
            | Please enter the appropriate SVC and Version |
            | for Adabas DBID 222:                         |
            |                                              |
            |          Adabas SVC ...... ___               |
            |          Adabas Version .. ___               |
            |                                              |
            |                                              |
            |                                              |
            +----------------------------------------------+
            |                                              |
            +----------------------------------------------+

Command: install db_____
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help        Exit                                                   Fin
```
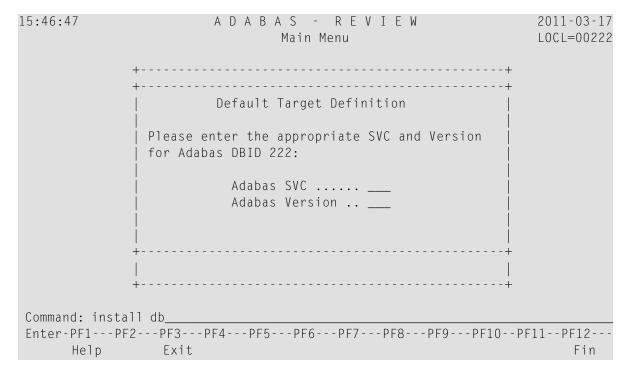
You are prompted to enter the Adabas SVC number and the Adabas version number of the database designated as the Adabas Review repository.

3   Type any number in the SVC field (an Adabas SVC is not used in BS2000). Type the Adabas version number in the Version field, and press ENTER.

Based on the information you provide, Adabas Review creates the default target definition and displays a message. A *target* is a database monitored by Adabas Review. For more information about target objects, read *Displaying SVC Lists and Target Objects*, in the *Adabas Review Administration Guide*.

The Initialization Process screen appears as shown in the following example:

```
15:47:10                     A D A B A S  -  R E V I E W               2009-03-10
                              Initialization Process                    LOCL=00222

     REV00104 - NOW CREATING DEFAULT TARGET DEFINITION
     REV00054 - NOW CREATING SAMPLE REPORT SUMMARY REPORT BY FILE
     REV00054 - NOW CREATING SAMPLE REPORT EXCEPTIONAL RESPONSE CODES
     REV00054 - NOW CREATING SAMPLE REPORT LONG RUNNING COMMANDS
     REV00054 - NOW CREATING SAMPLE REPORT COMMANDS BY HOUR
     REV00054 - NOW CREATING SAMPLE REPORT RATE OF COMMANDS AND IOS BY HOUR
     REV00054 - NOW CREATING SAMPLE REPORT RATE OF COMMANDS AND IOS BY DATE
     REV00054 - NOW CREATING SAMPLE REPORT NATURAL SUMMARY
     REV00054 - NOW CREATING SAMPLE REPORT WHO IS USING NATURAL
     REV00054 - NOW CREATING SAMPLE REPORT NATURAL PROGRAM TRACE
     REV00054 - NOW CREATING SAMPLE REPORT WHO USES SYSMAIN
     REV00054 - NOW CREATING SAMPLE REPORT TRANSACTION COUNT BY JOB
     REV00054 - NOW CREATING SAMPLE REPORT TRANSACTION COUNT BY JOB-NATAPPL
     REV00054 - NOW CREATING SAMPLE REPORT TRANSACTION COUNT BY JOB-USER
     REV00054 - NOW CREATING SAMPLE REPORT TRANSACTION COUNT BY NATURAL
 REV00006 - PRESS 'ENTER' TO CONTINUE INITIALIZATION PROCESS
 Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12--
```

The Adabas Review supplied reports are automatically added to the Adabas Review repository. As each report is added, a line is added to the Initialization Process screen. Each time the screen fills, you receive the following prompt:

```
Press ENTER to continue the initialization process.
```

4   Press ENTER as requested; continue until all Adabas Review supplied reports are initialized.

After all the reports are initialized, you are returned to the Adabas Review main menu.

Accessing Adabas Review

▶ **To access Adabas Review**

1   Access Natural as you normally do.

2   At the NEXT prompt, log on to the library SYSREVDB (type `LOGON SYSREVDB`).

> **Note:** Wherever the NEXT prompt is specified, the command can also be issued from the Natural main menu command line.

3   At the NEXT prompt, type `MENU` and press ENTER to access the Adabas Review main menu:

```
08:49:56                  A D A B A S  -  R E V I E W              2011-03-17
                                  Main Menu                         HUB=15690

                    Code              Description
                    ----     --------------------------------
                     AA          Available ADABAS Nuclei
                     AH          Available Review Hubs
                     AO          ADABAS Online System
                     ER          Edit Report Definition
                     ES          Edit Specialty Reports
                     ET          Edit Target Definition
                     LH          List History Reports
                     LR          List Report Definitions
                     LS          List Started Reports
                     LT          List Target Definitions
                     UP          User Profiles
                    ----     --------------------------------




Command: _____
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help      Exit                                               Fin    ↵
   ↵
```

Verifying the Installation Under TIAM/Batch or UTM

To confirm that Adabas Review is correctly installed, the installation is verified each time you enter the Adabas Review online subsystem.

The following errors may be detected during processing:

USER BUFFER NOT LARGE ENOUGH

Explanation	The user buffer extension is not large enough for Adabas Review to pass data to Adabas. The parameter LRVINFO was not set correctly in the link routine.
Action	Use the procedure in the installation section of the documentation to correctly install the Adabas Review link routine exit in the link routine.

ADAPRM IS MISSING FROM THE PARAMETER LIST

Explanation	The Natural ADAPRM area was not passed in the parameter list for the Adabas call. The value ADAPRM=ON was not set correctly in the parameter module (NATPARM) for the Natural nucleus currently executing.
Action	Use the procedure in the installation section of the documentation to correctly add ADAPRM=ON to the Natural NATPARM parameter module.

THE Adabas Review LINK ROUTINE IS NOT CORRECTLY INSTALLED

Explanation	The Adabas Review link routine exit is not installed in the copy of the link routine currently being executed.
Action	Use the procedure in the installation section of the documentation to correctly install the Adabas Review link routine exit in the link routine.

THE Adabas Review REPOSITORY HAS NOT BEEN INITIALIZED

Explanation	Adabas Review could not initialize because the repository file has not been initialized.
Action	Use the procedure described in section *Initializing the Adabas Review Data File* to correctly initialize the repository file.

5 Operations

This section of the documentation describes operational procedures and processes for Adabas Review after it has been installed and initialized.

SYSOUT and a Subtask List Files

Adabas Review spawns the following subtask jobs:

- In local mode, the Adabas Review database and in hub mode, the Adabas Review hub spawns a job where the Adabas Review subtask REVIEWB runs.
- When an automatically generated report is started, a job running REVAUTO is started.
- When a history report is started, a job running RAOSHIST is started.

Each of these jobs generates a SYSLST file with the following file name structure:

```
L.<L/O>.<task_number>,<subtask>,<timestamp>
```

where

L	is for SYSLST
O	is for SYSOUT
task_number	is the task number of the Adabas Review database or Adabas Review hub
subtask	is one of the following:
		REVIEWB#	for the Adabas Review subtask
		RAOSAUTO	for the autogenerated report subtask
		RAOSHIST	for the history report subtask
timestamp	is the STCK value when the subtask was started. In older Adabas versions (prior to 8.1 SP4), this value is in hexadecimal; in Adabas 8.1 SP4 and later versions, this value appears in the format: *yyyy-mm-dd.mmss.sss*.

The files provide important diagnostic information when errors occur within the system. They may, however, accumulate in number over time so that it becomes necessary to delete them.

▶ **To delete all accumulated Adabas Review subtask listings**

- Use the commands

```
/DELETE-FILE L.*REVIEWB#*
/DELETE-FILE L.*RAOSAUTO*
/DELETE-FILE L.*RAOSHIST*
```

Files Used by Adabas Review

This section describes the files used by Adabas Review:

- RVLOGnn Command Logging Files
- RVSUMnn Summary Logging Files
- RVUALT History File
- RVUAUT1 and RVUAUT2 Report Definition Data Sets (Files)
- RVUCARD Data Set (File) for GENCARD Command
- RVUEXI Parameter File
- RVUEXP Companion Output File
- RVUFLD User Field Parameter Data Set
- RVUPARM Dummy Data Set
- RVUPRTnn Logical Printer Files

> **Note:** The RVUPRT00 data set is mandatory for the Adabas Review processor. Omitting this data set prohibits the start of the subtask and affects the subsequent use of SYSREVDB for Adabas Review administration. For example, the TECH command within SYSREVDB can yield unpredictable results when Adabas Review is started without the RVUPRT00 data set. Other files described in this section can be omitted if not needed.

RVLOGnn Command Logging Files

The RVLOG*nn* files are sequential command logging files. There may be more than two command logging files. If the files are given no secondary extent, data will be continued in the next RVLOG*nn* (*nn+1*) file. When the last command logging file has filled, command logging will start overwriting the data in RVLOG01. The P.GENERATE job can be amended to create more than two command logging files, as needed by your installation.

Each report performing command logging must reference a unique file name prefix and a number of command log files associated with that file name prefix.

> **Note:** All command log data sets (files) for a particular report must be the same size.

Adabas Review command logging under BS2000 is an optional feature. BS2000 uses its own command logging files.

Refer to the section *Command Logging Considerations*, elsewhere in this guide for more information.

RVSUMnn Summary Logging Files

The RVSUM*nn* files are sequential summary logging files. There may be more than two summary logging files. If the files are given no secondary extent, data will be continued in the next RVSUM*nn* (*nn+1*) file. When the last summary logging file has filled, summary logging will start overwriting the data in RVSUM01. The P.GENERATE job can be amended to create more than two summary logging files, as needed by your installation.

Each report performing summary logging must reference a unique file name prefix and a number of summary log files associated with that file name prefix.

Note: All summary log data sets (files) for a particular report must be the same size.

Adabas Review summary logging under BS2000 is an optional feature. BS2000 uses its own summary logging files.

Refer to the section *Summary Logging Considerations*, elsewhere in this guide, for more information.

RVUALT History File

RVUALT is an alternate sequential file used to save history data.

Adabas Review reports may specify whether the data accumulated by the report will also be written to the Adabas Review repository. Historical data is useful for monitoring database performance and for performing trend analysis.

The parameters that determine whether Adabas Review writes historical data are set when a user creates or edits a report definition. These history parameters appear on the Report Options screen of the Edit Report (ER) function.

If historical data is to be written by a report running in batch mode, the history parameters make up the COPY statement.

The Adabas Review startup job contains a RVUALT job control statement. This statement identifies an alternate file to which historical data may be written.

In situations where the Adabas Review repository is unavailable, Adabas Review receives a response code 148.

In this case, Adabas Review writes the data to the file specified by the RVUALT job control statement, if it has been assigned in the job stream. The next time the Adabas Review hub is started, another subtask is started to copy the historical data to the Adabas Review repository.

Note: A separate RVUALT data set (file) must be allocated for each Adabas Review hub.

For BS2000 systems, allocate this file using P.GENERATE.

RVUAUT1 and RVUAUT2 Report Definition Data Sets (Files)

RVUAUT1 and RVUAUT2 are data sets (files) that contain the report definition control statements for autostarted reports and also some system relevant session parameters such as buffer sizes (for more information, read *INPUT Statement*, in the *Adabas Review User's Guide*. Adabas Review generates the statements and writes them to these files. When Adabas is initialized, the reports are started automatically.

For BS2000 systems, generate these files using P.GENERATE.

> **Note:** In a future release of Adabas Review, RVUAUT2 will no longer be supported. RVUAUT1 only will be used for autostarted reports.

RVUCARD Data Set (File) for GENCARD Command

RVUCARD is a data set (file) used by the `GENCARD` command. The `GENCARD` command creates batch parameter statements from report definitions created online.

For BS2000 systems, the command requires the user to supply a DDNAME, and the generated statements are written to the corresponding file.

RVUEXI Parameter File

RVUEXI is a parameter file that contains parameters to control the Adabas Review operating environment. The Adabas Review administrator may edit the RVUEXI parameters according to the specific needs of the site.

Refer to section *Editing the RVUEXI Parameter File* for more information.

RVUEXP Companion Output File

RVUEXP is a companion file to RVUEXI and if specified, any parameter processing errors encountered in RVUEXI will be written to the RVUEXP output file.

RVUFLD User Field Parameter Data Set

The RVUFLD data set (file) contains parameter control statements for creating user-defined fields. Parameters in this data set (file) define the length, type, and location of reporting fields to be determined by the user.

RVUPARM Dummy Data Set

Software AG recommends that you set RVUPARM as a dummy data set. In previous releases, batch parameter statements were read from this file. Because these statements may now be generated using the `GENCARD` command, you no longer need to code batch parameters manually. Parameters may be coded in this data set (file) if desired, and Adabas Review will access this data set (file) prior to accessing data sets (files) specified by RVUAUT1 and RVUAUT2.

For BS2000 systems, use the data set (file) *DUMMY.

> **Notes:**

1. When RVUPARM is "dummied", the following message displays: **REV20164 - OPEN FAILED FOR RVUPARM**. When RVUPARM has been dummied, this message is normal and should be ignored.

2. The above error message can be avoided by creating a RVUPARM data set (file) that contains only an asterisk.

RVUPRTnn Logical Printer Files

RVUPRT00 for Adabas Review Statistics

RVUPRT00 is the Adabas Review logical printer for statistics about Adabas Review operations, such as number of reports, number of records processed, etc.

> **Note:** The RVUPRT00 data set is mandatory for the Adabas Review processor. Omitting this data set prohibits the start of the subtask and affects the subsequent use of SYSREVDB for Adabas Review administration. For example, the TECH command within SYSREVDB can yield unpredictable results when Adabas Review is started without the RVUPRT00 data set. Other files described in this section can be omitted if not needed.

RVUPRTnn Files for Reports

RVUPRT01 and above are Adabas Review logical printers used for reports. One logical printer is shared by all summary reports; each detail report requires its own logical printer. A job control statement corresponding to each logical printer must be added to the Adabas Review hub startup JCL (hub mode) or to the Adabas nucleus startup JCL (local mode).

Assignment of logical printers to reports depends on the order in which the reports are started:

■ If the first report started is a *summary* report, RVUPRT01 is used for all summary reports.

■ If the first report is a *detailed* report, RVUPRT01 is assigned to the detailed report, and another logical printer is used for summary reports. When a detail report is purged, the corresponding printer number is freed. The next detail report started will reuse the lowest available printer number.

Editing the RVUEXI Parameter File

RVUEXI is a parameter file that contains parameters which control the Adabas Review operating environment. The Adabas Review administrator may edit the following RVUEXI parameters according to the specific needs of the site:

> **Note:** Default values are underlined in the following tables.

RVUEXI User-Specified Parameter

Parameter	Possible Values	Default
UIDT-CELLS	100-10000	1000

The user ID table is managed using a hashing algorithm. This value is numeric and specifies the number of 8-byte cells that should be allocated to the user ID table manager.

RVUEXI Timeout Parameters

Parameter	Possible Values	Default
UCMD-TIMEOUT	0-999	60

A small reentrant storage area is allocated for each active user of the Adabas Review online system (LIST, VIEW, START, PURGE reports functions). This area is deallocated when the user finishes each online request.

However, if the user's Natural session terminates abnormally during an Adabas Review operation, the Adabas Review nucleus may not have the opportunity to deallocate the reentrant area.

Specifying the UCMD-TIMEOUT parameter gives the Adabas Review nucleus a timeout value after which these inactive areas are deallocated. The timeout value is numeric and is specified in minutes.

Parameter	Possible Values	Default
UIDT-TIMEOUT	1-999	60

To report on the field `TPTRANCT`, Adabas Review must maintain a work area for each user that accesses Adabas. This area is called the user ID table.

If this field is specified in a report, the facility is activated and an area is allocated when Adabas Review receives the first call from each user. The area is deallocated when Adabas Review receives an Adabas CLOSE (`CL`) command for that user.

However, if the user's application does not issue a CL during termination, Adabas Review is unaware that the session has terminated.

The UIDT-TIMEOUT parameter is used to expire inactive user ID table elements. If the field `TPTRANCT` is *not* specified in any active reports, Adabas Review will *not* maintain user ID table elements for each user. This value is numeric and specifies the timeout value in minutes.

Command Logging Considerations

This section discusses administrative considerations when performing Adabas Review command logging.

Setting Up Command Logging

Adabas Review provides you with options for determining how command logging is processed for reports. However, the Adabas Review administrator must complete the following tasks to set up the Adabas Review environment so that command logging can take place:

1. Allocate command log data sets (files). Command log data sets (files) must be allocated for reports.

2. Add job control statements to the Adabas Review hub startup JCL (hub mode) or to the Adabas nucleus startup JCL (local mode).

   Each report that performs command logging must have a command log file assigned to it. For each command log file, there must be a corresponding job control statement in the startup JCL.

   The name must be a five-character name followed by a sequential number (01, 02, etc.) corresponding to the number of command logs. For example, if the name is "CMLOG" and there are two data sets (files) to be defined, two statements are required with names as follows: CMLOG01 and CMLOG02. The five-character name is referenced by the report in the File command logging report option. The total number of data sets (files) is referenced by the report in the Num of Logs command logging report option. For more information about these logging options, read *Logging Options*, in the *Adabas Review User's Guide*.

   Refer to the section *RVLOG01 and RVLOG02 Command Logging Files*, elsewhere in this guide, for more information.

Using the Command Logging User Exit

Adabas Review writes to command log files in sequential order. When a command log file is filled, Adabas Review closes the file, switches to the next sequential file, and continues logging. When all files have been filled, Adabas Review switches back to the oldest file to log data. If a command logging user exit is *not* specified, Adabas Review will write over the log data in the file containing the oldest data.

A command logging user exit can be specified so that the data contained in the command log file can be copied to a new file before the command log file is overwritten with new command log data. This user exit will be called each time a command log file is closed or opened, but it is only called if you reference it in the User Exit report logging option. For more information about this logging option, read *Logging Options*, in the *Adabas Review User's Guide*.

For complete information about the command logging user exit, read *REVUXLOG: Command or Summary Logging User Exit*, in the *Adabas Review Reference Guide*

Summary Logging Considerations

This section discusses administrative considerations when performing Adabas Review summary logging.

Setting Up Summary Logging

Adabas Review provides you with options for determining how summary logging is processed for reports. However, the Adabas Review administrator must complete the following tasks to set up the Adabas Review environment so that summary logging can take place:

1. Allocate summary log data sets (files).

    Summary log data sets (files) must be allocated for reports.

2. Add job control statements to the Adabas Review hub startup JCL (hub mode) or to the Adabas nucleus startup JCL (local mode).

    Each report that performs summary logging must have a summary log file assigned to it. For each summary log file, there must be a corresponding job control statement in the startup JCL.

    The name must be a five-character name followed by a sequential number (01, 02, etc.) corresponding to the number of summary logs. For example, if the name is "SMLOG" and there are two data sets (files) to be defined, two statements are required with names as follows: SMLOG01 and SMLOG02. The five-character name is referenced by the report in the summary file summary logging report option. The total number of data sets (files) is referenced by the report in the Num of Logs summary logging report option. For more information about these logging options, read *Logging Options*, in the *Adabas Review User's Guide*.

Refer to the section *RVSUM01 and RVSUM02 Summary Logging Files*, elsewhere in this guide, for more information.

Using the Summary Logging User Exit

Adabas Review writes to summary log files in sequential order. When a summary log file is filled, Adabas Review closes the file, switches to the next sequential file, and continues logging. When all files have been filled, Adabas Review switches back to the oldest file to log data. If a summary logging user exit is not specified, Adabas Review will write over the log data in the file containing the oldest data.

A summary logging user exit can be specified so that the data contained in the summary log file can be copied to a new file before the summary log file is overwritten with new summary log data. This user exit will be called each time a summary log file is closed or opened, but it is only called if you reference it in the Log Full Exit report logging option. For more information about this logging option, read *Logging Options*, in the *Adabas Review User's Guide*.

For complete information about the summary logging user exit, read *REVUXLOG: Command or Summary Logging User Exit*, in the *Adabas Review Reference Guide*

Modifying Configuration Parameters

The Adabas Review administrator can modify configuration parameter values in the Natural text member CONFIGDB.

▶ **To access and modify the CONFIGDB parameters**

1   At the Natural NEXT prompt, type `LOGON SYSREVDB` and press ENTER.

2   Type the command `EDIT CONFIGDB` and press ENTER.

3   Type `SAVE` and press ENTER to save the changes.

4   Type `MENU` at the prompt to return to Adabas Review.

CONFIGDB File Parameter Description

CONFIGDB contains parameters that affect Adabas Review.

CONFIGDB is saved in the Natural library SYSREVDB.

Parameter	Possible Values	Default
CURSOR-POSITION	BOT | TOP	BOT

Specifies whether the cursor is placed on the command line (BOT) in list displays, or on the SEL field (TOP).

Parameter	Possible Values	Default
DECIMAL-CHAR	NAPARM DC=*value*	.

Specifies the decimal character to use when generating Adabas Review reports. The value specified should match the value specified for the NATPARM DC parameter. To determine the current setting of the NATPARM DC parameter, issue GLOBALS at the NEXT prompt. The Adabas Review default value for DECIMAL-CHAR is a period ('.').

Parameter	Possible Values	Default
PC-FILE	'text'	'DOWNLOAD-PC-FILE-5'

Specifies the value to be used in the DOWNLOAD statement in the Adabas Review-generated programs. The value specified must be delimited with single apostrophes. The field is alphanumeric, maximum 20 characters.

Parameter	Possible Values	Default
RVXB-MESSAGE	YES | NO	YES

Specifies whether to display error messages about the incorrect installation of the Adabas Review link routine exits during installation verification.

Parameter	Possible Values	Default
UBAR	any valid character	|

Specifies the character to be used in maps as the vertical border. Any character recognized by your system is valid; the default value is '|'.

Parameter	Possible Values	Default
CLOSE-DBID	YES | NO	NO

Specifies whether to issue a close (CL) command to the old Adabas Review database when a new database is accessed with the HUB= (DBID=) command.

Parameter	Possible Values	Default
REVIEWDB-UEX	name	exit not enabled

Specifies the name of the site-dependent Natural routine to be called for validation of a user's access to an Adabas Review function.

Refer to Natural source member N-USEXIT for more information on the calling and processing conventions for this exit.

Parameter	Possible Values	Default
MAXIMUM-MAXK	0	*nnnn*	0

Specifies the maximum value that can be specified for the report option, Max K. The Max K value determines the maximum amount of storage available for a specific report.

A value of 0 (the default) indicates that the Max K option is not restricted.

When specifying a value, `MAXIMUM-MAXK` must be 8 or greater.

Parameter	Possible Values	Default
OPEN-DBID	YES	NO	NO

Specifies whether an open (`OP`) command is issued to the new Adabas Review database when a new database is accessed with the `HUB= (DBID=)` command.

Adabas Review Natural User Exits

Adabas Review has two Natural user exits. These exits are found in the Adabas Review system library in Natural, and may be modified by using the Natural editor.

For more information about these exits, read *P-UEXIT1 and P-UEXIT2: Review Natural User Exits*, in the *Adabas Review Reference Guide*.

6 **Operator Commands**

The commands in this section of the documentation are used to control the Adabas Review (ADAREV).

The operator commands perform the following general types of operations:

- Terminate an Adabas or user session;

- Display nucleus or utility information;

- Log commands into CLOG;

- Change Adabas operating parameters or conditions.

The commands are listed alphabetically.

Entering Operator Commands

The ADAREV operator commands are entered the same way as other Adabas operator commands.

In BS2000 environments, enter each command at the operator console by addressing the Adabas nucleus with its task sequence number (TSN) in the following form:

```
/INTR   TSN,command
```

For testing purposes, the nucleus may be run as a dialog process. The nucleus may be interrupted by pressing the K2 key, after which the prompt "/" appears. Now an operator command can be sent to the nucleus in the following form:

```
/INTR   command
```

> **Note:** In the dialog mode, the nucleus stops as long as the INTR message is not sent back. The resume statement /RESUME causes the nucleus to resume where it was interrupted when no operator command is issued.

Operator commands are processed by a STXIT routine.

Operator Command Overview

The remainder of the section describes the commands that an Adabas Review operator can enter from the console.

- ADAEND Operator Command
- CANCEL Operator Command
- DCLIENT Operator Command
- DCQ Operator Command
- DNC Operator Command

- STARTCLIENT Operator Command
- STOPCLIENT Operator Command
- Adabas Operator Commands

ADAEND Operator Command

Use the ADAEND operator command to terminate an ADAREV session normally; the Adabas Review nucleus is terminated normally. No new monitoring commands are accepted and all currently queued requests are dropped.

CANCEL Operator Command

Use the CANCEL operator command to terminate ADAREV immediately; the Adabas Review nucleus is abnormally terminated and the job aborts with a user completion code of 253.

DCLIENT Operator Command

DCLIENT = { *dbid* | ALL}

Use the DCLIENT operator command to display information about the specified client or about all (ALL) clients. DCLIENT displays the number of clients currently registered with the hub and the individual status of each client, including the client's DBID, the associated nucleus IDs (for cluster databases), the time of last activity, the number of DBID=ALL reports, the number of database reports, any buffers required by the client, and the total number of monitoring data records received from the client. The following is an example of the message output:

```
REVH13 11135 Dbid Nucid Last-act Rpts Buffers Log-records
REVH13 11135 00001        22:15:18 01/01 FRSVIM 2222
REVH13 11135 00002        --:--:-- 01/00 ------ 0
REVH13 11135 00129        --:--:-- 01/02 -R---- 0
REVH13 11135 00129-00120 22:15:18 00/00 ------ 1
REVH13 11135 00129-00177 22:15:20 00/00 ------ 170
REVH13 11135 00129-00230 --:--:-- 00/00 ------ 0
```

In this example:

- Database 001 has one DBID=ALL report and one database-specific report running (01/01) and six specific buffers requested: the format buffer (F), the record buffer (R), the search buffer (S), the value buffer (V), the ISN buffer (I), and the multifetch buffer (M). This database sent 2222 log records to the hub.

- Database 002 has only one DBID=ALL report running (01/00) and no specific buffers are requested. This database has not yet sent any log records to the hub.

- Finally, database 129 is a cluster database with three nucleus IDs (00120, 00177, and 00230). It has one DBID=ALL report running and two database-specific reports (01/02). A record buffer only is requested. This report and buffer information is not repeated for each nucleus in the cluster, but the individual values for last activity time and the number of log records submitted to the hub for each nucleus is shown.

DCQ Operator Command

Use the DCQ command to display the entire list of queued requests. The DCQ displays the sequence number, client's job name, client's user ID, request code, and status flags for each queued request.

> **Note:** If a large value was set for NC (as is recommended), the DCQ request may incur delays in the Adabas Review hub processing if a large number of queue elements must be displayed. Also, the display on the operator console may fill the console's buffers causing further system delays.

The following is an example of the message output:

```
AREV07 hubid  0000000013 NEXT EXPECTED SEQUENCE NUMBER
AREV07 hubid  0000000011 ADASMP    ARVU D  (C1D9E5E400C40000)  PC 2800
AREV07 hubid  0000000012 ADASMP    ARVU D  (C1D9E5E400C40000)  PC 2800
```

DNC Operator Command

Use the DNC operator command to display the number of queued requests currently in the command queue.

STARTCLIENT Operator Command

STARTCLIENT = { *dbid* | ALL }

Use the STARTCLIENT operator command to initiate a change order command to the specified client or to all (ALL) clients informing them to begin sending monitoring data to the hub. The change order is only sent to registered clients (clients that appear on the `DCLIENT` operator command display).

> **Note:** A change order changes a client's operation only if the monitoring status has been changed. This occurs only in cases where a previous `STOPCLIENT` operator command had been issued.

STOPCLIENT Operator Command

STOPCLIENT = { *dbid* | ALL }

Use the STOPCLIENT operator command to initiate a change order command to the specified client or to all (ALL) clients informing them to stop sending monitoring data. The change order is only sent to registered clients (clients that appear on the `DCLIENT` operator command display).

Adabas Operator Commands

The following operator commands can be entered to monitor and control Adabas nucleus operation.

- ADAEND
- CANCEL

ADAEND

Terminates the Adabas session normally. No new users are accepted after this command has been issued. ET logic updating continues until the end of the current logical transaction for each user. After all activity has been completed as described above, the Adabas session is terminated.

CANCEL

Terminates the Adabas session immediately. All command processing is immediately suspended. A pending AUTORESTART is in effect, which in turn causes the AUTORESTART routine to be executed during the initialization of the next Adabas session.

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