software AG

Adabas Review

Installation and Operations for z/OS

Version 4.5.2

May 2011

Adabas Review

Table of Contents

1 Preparing for the Installation

This chapter provides installation preparation information for Adabas Review under z/OS operating system environments. See the current version of the Adabas Review Release Notes for information about supported versions and release levels.

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

Storage Requirements

Adabas Review must allocate storage to execute. Storage is required for

- the Adabas Review hub, if used;
- the REVIEW-BUFFER, used as a queueing area for Adabas command log records;
- reports that are executing;
- users accessing the database from the Adabas Review online system; and
- work areas used in Adabas Review's processing.

The type, purpose, and size of these storage areas is discussed in the following sections.

Adabas Review allocates storage *above the line* whenever it is permitted by the architecture of the machine and the operating system on which it is executing.

In *z/OS* environments, Adabas Review allocates all storage from z/OS subpool 5. This allows you to accurately determine the exact amount of storage Adabas Review is using with a z/OS monitoring package.

- Storage for the Hub
- Storage for the REVIEW-BUFFER
- Storage for Reports
- Storage for Online Users
- Storage for Work Areas

Storage for the Hub

If you use Adabas Review in hub mode, the hub has a separate storage requirement for its operating queues and working areas. The queues are used to buffer the incoming command log records from the clients until the records can be sent to REVIEWB.

Two queues, both controlled by the database administrator (DBA), are used by the Adabas Review hub: the command queue (sized using the ADARUN parameter `NC`) and the attached buffer (sized using the ADARUN parameter `NAB`). For more information, read about these ADARUN parameters in *ADARUN Parameters*, in the *Adabas Review Concepts Manual*.

- Command Queue
- Attached Buffer

Command Queue

The command queue stores information about the client nucleus such as job name, internal ID, etc. Each entry in the command queue represents one command log record from a client.

An entry exists for the time that a command log record is queued and awaiting selection from the hub until the time that the record is sent to REVIEWB. Once the command log record is sent to REVIEWB, the entry is released from the command queue.

This means that the command queue must be large enough to accommodate the backlog of command log records from the client nuclei. If the command queue is too small, it is possible that command log records will be dropped by the hub.

The ADARUN parameter that controls the command queue size is `NC`. The value of this parameter should be set higher for the hub than it is for individual client nuclei.

The NC value should be set to handle the arrival rate based on:

- the number of clients;
- their respective command processing limits;
- the processing power of the CPU(s); and
- the priority settings of the nuclei and hub address spaces, partitions, or regions.

Example

If a client nucleus can process 2000 commands per second, then the expected arrival rate at the hub is a maximum of 2000 command log records per second. When possible, buffering occurs in the client nucleus to buffer several command log records and send them with one call to the hub.

There is no general rule for estimating the `NC` requirements for a particular hub. However, in this example, you could start with NC=1000 and monitor the results.

The Command Queue and Trans-port (z/OS only)

When using Trans-port in z/OS environments, most communication is handled via a fast buffer mechanism using a fixed buffer length. In such cases, the command queue is not used.

Attached Buffer

The attached buffer is used to store the contents of the command log records and their associated data extensions.

As with the command queue, an element within the attached buffer is allocated to hold the command log record for the duration of time that the record is queued for selection, up to the time the record can be sent to REVIEWB. The element is freed once the record is sent to REVIEWB.

Also like the command queue, the attached buffer must be large enough to hold the queued command log records for the time required to stage the records for REVIEWB. Software AG recommends setting the parameter high to ensure that command log data is not dropped by the hub.

The ADARUN parameter controlling the attached buffer size is NAB. The value of this parameter should also be set higher for the hub than it is for individual client nuclei.

The NAB value must be large enough to buffer the data passed by the client nuclei. The amount of data passed by a client nucleus depends upon the Adabas Review report requirements (for example, whether control buffers are required or whether the I/O list option is being used).

Example

The average size of a command log record and extensions, excluding control buffers, is 2500 bytes.

One approach would be to compute:

```
NAB = (NC * 2500 / 4096)
```

- where 4096 is the size of one NAB segment. If NC=1000 (see the example) , the starting value would be:

```
NAB = (1000 * 2500 / 4096) = 610
```

This computation assumes that there are no control buffers or I/O list elements being passed to the hub.

The Attached Buffer and Trans-port (z/OS only)

When using Trans-port in z/OS environments, most communication is handled via a fast buffer mechanism using a fixed buffer length. The attached buffer area is not used.

Storage for the REVIEW-BUFFER

REVIEW-BUFFER is used to queue Adabas command log records to be sent to REVIEWB. In hub mode, it is located in the hub (server) address space.

The `BUFFER-SEGMENTS` parameter specifies the size of the REVIEW-BUFFER. Each buffer segment is 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.

In addition, two INPUT statement parameters have been added as replacements for the BUFFER-SEGMENTS parameter. The BUFFER-SEGMENTS parameter will no longer be supported in a future release of Adabas Review. It is still valid in Adabas Review 4.5, but is ignored if the following parameters are specified:

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

For more information about the interaction of the BUFFER-SEGMENTS, BUFFERS-4K, and BUF-FERS-32K parameters, read *BUFFER-SEGMENTS Parameter Changes*, in the *Adabas Review Release Notes*

For z/OS, z/VSE, and BS2000, it is possible to execute with a REVIEW-BUFFER that is one megabyte.

A larger REVIEW-BUFFER provides a larger queueing area for command log records being sent to REVIEWB and decreases the possibility that Adabas will have to wait for REVIEWB to process these records in the event that REVIEW-BUFFER becomes full.

Storage for Reports

For Control Blocks

When a report is started, either using autostarted report definition parameters or by an online Adabas Review user, storage is allocated for control blocks that define the criteria for the collection of the data.

Typically, the storage allocation for control blocks is two (2) kilobytes, but may be as much as four (4) kilobytes if the report is a history report or the report specifies the collection of many fields.

For Data Collection Areas

In addition to the report control blocks, storage is allocated for the collection of data. The data collection areas are allocated in two (2) kilobyte pieces and a subsequent data collection area is only allocated when the current area is full.

Total Storage Limit

The total storage allocation for a report is limited by the MAXSTORE report parameter. When the total storage allocation for a report is equal to the MAXSTORE value, the report is marked as inactive and stops accumulating data. When a report is purged, all storage associated with the report is deallocated.

Storage for Online Users

Adabas Review's online system uses Adabas calls to start, view, or purge a report. Each request requires that Adabas Review perform some processing to fulfill the request.

■ Each request from the Adabas Review online system results in the allocation of a piece of storage (about 500 bytes or one-half kilobyte) that is deallocated when the request has been satisfied.

■ To maintain the integrity of each request, Adabas Review allocates an area for each user requesting Adabas Review to service a request. For example, a request to view a report requires an Adabas call for each record that is to be viewed online.

■ In cases where more than one user is viewing the same or different reports, Adabas Review must remember the status of each user between Adabas calls.

Storage for Work Areas

Adabas Review allocates storage for work areas and areas used for reading from and writing to files. These areas are typically small and are kept and used throughout the time that Adabas Review is active.

About the Adabas Review Installation Tape

This section describes the contents of the Adabas Review installation tape and the space requirements for each data set. Sample JCL to accomplish the transfer is also included.

Refer to the "Report of Tape Creation" for the volume serial number, density, media type, data set names, and data set sequence numbers for the SM level being installed.

- Copying the Tape Contents
- Installation Tape Description
- Size of Adabas Review (Local Mode Only)
- Space Requirements
- Source Library Members
- Jobs Library Members

Copying the Tape Contents

> **Note:** If you are using SMA, refer to the *System Maintenance Aid* documentation. If you are not using SMA, follow the instructions below.

This section explains how to copy all data sets from tape to disk. You will then need to perform the individual installation procedure for each component to be installed.

- Step 1: Copy Data Set COPY.JOB from Tape to Disk
- Step 2: Modify COPY.JOB on Your Disk
- Step 3: Submit COPY.JOB

Step 1: Copy Data Set COPY.JOB from Tape to Disk

The data set `COPY.JOB` contains the JCL required to copy all data sets from tape to disk. If the data sets for more than one product are delivered on the tape, the data set `COPY.JOB` contains the JCL to unload the data sets for all delivered products from the tape to your disk.

Copy `COPY.JOB` to your disk using the following sample JCL:

```
//SAGTAPE JOB SAG,CLASS=1,MSGCLASS=X
//* -----------------------------
//COPY EXEC PGM=IEBGENER
//SYSUT1 DD DSN=COPY.JOB,
// DISP=(OLD,PASS),
// UNIT=(CASS,,DEFER),
// VOL=(,RETAIN,SER=tape-volume),
// LABEL=(2,SL)
//SYSUT2 DD DSN=hilev.COPY.JOB,
// DISP=(NEW,CATLG,DELETE),
// UNIT=3390,VOL=SER=volume,
// SPACE=(TRK,(1,1),RLSE),
// DCB=*.SYSUT1
//SYSPRINT DD SYSOUT=*
//SYSIN DD DUMMY
//
```

where:

hilev is a valid high-level qualifier
tape-volume is the tape volume name, for example: T12345
volume is the disk volume name

Step 2: Modify COPY.JOB on Your Disk

Modify COPY.JOB according to your local naming conventions and set the following disk space parameters:

- Set HILEV to a valid high-level qualifier.

- Set LOCATION to a storage location.

- Set EXPDT to a valid expiration date.

Step 3: Submit COPY.JOB

Submit COPY.JOB to copy all data sets from tape to your disk.

Installation Tape Description

The Adabas Review version 4.5 installation tape contains the following data sets:

Data Set	Created Using...	DCB=	Description
REV*vrs*.INPL	IEBGENER	(RECFM=VB,LRECL=4624,BLKSIZE=4628)	Adabas Review Natural objects.
REV*vrs*.SYSF	IEBGENER	(RECFM=VB,LRECL=9996,BLKSIZE=1000)	Adabas Review repository file.
REV*vrs*.SRCE	IEBCOPY	(RECFM=FB,LRECL=80,BLKSIZE=23440)	Adabas Review source modules and more installation jobs.
REV*vrs*.JOBS	IEBCOPY	(RECFM=FB,LRECL=80,BLKSIZE=23440)	Adabas Review installation jobs.
REV*vrs*.LOAD	IEBCOPY	(RECFM=U,BLKSIZE=6447)	Adabas Review load library.
REV*vrs*.ZAPS	IEBCOPY	(RECFM=FB,LRECL=80,BLKSIZE=3120)	Zaps required for Adabas Review on this platform.

Size of Adabas Review (Local Mode Only)

The REGION parameter for the Adabas nucleus job step may need to be increased to accommodate Adabas Review. An increase of 1 megabyte is normal.

Space Requirements

The space requirements for each data set on the installation tape are given in the following table:

Data Set Type	Directory Blocks	Cylinders (3390)
INPL	---	8
SYSF	---	1
SOURCE	10	1
JOBS	10	1
LOAD	10	1

In addition, the alternate history file for Adabas Review and the CICS-dependent load library for CICS installations require additional space as follows:

Data Set Type	Directory Blocks	Cylinders (3390)
Alternate history file	---	2
CICS-dependent load library	5	1

Source Library Members

Source library members for Adabas Review are as follows:

Member	Description
CLEXRUBX	Part of LORECR macro used in REVUXDET
FILETAB	Part of LORECR macro used in REVUXDET
LORECR	Macro of LORECR used in REVUXDET
REVCOST	Sample Adabas Review parameters used to produce an Adabas cost accounting report
REVUEX1	Sample user exit 1 (User field exit) program
REVUEX5	Sample user exit 5 program
REVUXDET	Sample detail report user exit for writing SMF records
REVUXLOG	Sample Assembler source code for an Adabas Review command logging user exit
REVUXSUM	Sample summary report user exit
RVUAUT1	Sample startup parameters for Adabas Review
RVUAUT2	Sample startup parameters for Adabas Review
RVUCARD	Sample parameters for running a batch job
RVUEXI	Sample operating environment control parameters for Adabas Review
RVUPARM	Internal use only
RVUFLD	Sample parameters for user-defined fields
UEX5PARM	Macro used in REVUEX5
ZAPOPT	Contains optional zaps for installing Adabas Review

Jobs Library Members

Jobs library members for Adabas Review are as follows:

Member	Description
AREVUEX1	Sample job for assembling the REVUEX1 (User field exit)
BATCHRPT	Sample job to create batch reports with online administration tool SYSREVDB.
EXPAND3	Sample job to upgrade an Adabas Review version 4.4 (or 4.3) repository to an Adabas Review version 4.5.1 repository.
EXPAND4	Sample job to upgrade an Adabas Review version 4.5.1. repository to an Adabas Review version 4.5.2 repository.
HISTCOMP	Sample job to compress history data from a batch Natural execution.
HISTDEL	Sample job to delete history data from a batch Natural execution.
HISTVIEW	Sample job to view history data from a batch Natural execution.
HUBJCL	Sample job to start the Adabas Review hub (not used in local mode).

Member	Description
LREVLCIC	For CICS installations; sample job used to link the Adabas Review link routine exit with the CICS Adabas command-level link routine; used when reporting in CICS.
LREVLCO	For Com-plete installations; sample job used to link the Adabas Review link routine exit with the Com-plete Adabas link routine; used when reporting in Com-plete.
LREVLNI	For IMS installations; sample job used to link the Adabas Review link routine exit with the IMS Adabas link routine; used when reporting in IMS.
LREVLNK/ LREVLKNR	For TSO installations; sample jobs used to link the Adabas Review link routine exit with the TSO/batch Adabas link routine (reentrant link routine) ; used when reporting in TSO or batch jobs.
LREVUEX1	Sample job for binding the ADALINK REVEXIT modules (RDBLxxxx) together with the user exit REVUEX1 (User field exit).
MAKEALT	Sample JCL to create the RVUALT data set.
REVCLCOP	Sample JCL to copy and set end-of-file for a sequential command log created by Adabas Review.
REVIEWB	Sample JCL to process a sequential command log by the batch component of Adabas Review.
REVINPL	Sample job used to INPL the Adabas Review programs and DDMs from the INPL data set to the Natural system files.
REVLOAD	Sample job used to load the Adabas Review repository file.

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: Com-plete; CICS; TSO or TSS; and IMS/DC.

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

Before you install the product, be sure you have read the *Release Notes*, paying special attention to the supported platform list, the description of Software AG product support, enhancements, restrictions, and any migration considerations pertinent for this release of Adabas Review.

2 Installation: Phase 1

Adabas Review can be installed in local mode in the Adabas address space, or as a hub (server) in its own address space with an interface (client) located in the address space of the Adabas being monitored. The procedures are the same except as noted.

Adabas Review is installed in two phases. This chapter describes Phase 1, which comprises all the steps that are independent of any particular TP monitor environment.

To complete Phase 1 of the installation, read the sections in Phase 1 that apply to the type of installation you have chosen and follow the steps described in those sections in order they are described in this chapter.

> **Note:** Instructions for copying the tape contents to disk are provided in *Copying the Tape Contents*, elsewhere in this guide.

Phase 2, which comprises the steps that are specific to the TP monitor being used, is described in *Installation: Phase 2*, elsewhere in this guide.

Install Adabas Review under Natural

This section applies to both local and hub mode installations. It includes the following steps:

- Step 1. INPL Adabas Review
- Step 2. Create a Natural profile using the SYSPARM facility
- Step 3. Define Adabas Review to Natural Security

Step 1. INPL Adabas Review

> **Note:** There is no longer a SYSREV or SYSREVUP library. The entire application is now contained in the SYSREVDB library.

INPL the Adabas Review programs and DDMs from the INPL data set to your Natural system files.

You may use any of your site-dependent Natural INPL JCL. Sample job REVINPL is provided in the Adabas Review jobs library.

Step 2. Create a Natural profile using the SYSPARM facility

1. Include the following parameter settings in the Natural profile:

Parameter	Requirement
LS=250	minimum
PS=80	minimum
MADIO=5000	minimum
MAXCL=0	minimum
ESIZE=64	minimum
ADAPRM=ON	required. ADAPRM=ON must be specified in order to use Adabas Review to report on Natural information.
NTWORK(7),AM=PC	required for PC downloads. 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.
NTPRINT(1)	Review uses Natural printer 1 to generate report display programs in the Natural source area. For more information see the Natural documentation.

2. 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.

3. Reassemble and link the NATPARM module to your Natural nucleus.

Step 3. Define Adabas Review to Natural Security

If Natural Security is installed:

1. Define the SYSREVDB library for the Adabas Review system.

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

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

```
REVIEW-ADABAS-V452-CLOG
REVIEW-FNAT
REVIEW-ADABAS-V452-SYSTEM
```

Install the Adabas Review Repository

This section applies to both local and hub mode installations.

The Adabas Review repository is a system file used for storing descriptions of interactive reports, target definitions, and for saving historical data accumulated by Adabas Review reports. Any Adabas 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.

> **Notes:**

1. 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.

2. To convert an Adabas Review version 4.3 or 4.4 repository to a version 4.5 repository, run the EXPAND3 job from the JOBS library.

This step 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 the repository file
- Step 4. Convert your history data

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 SVC=svc parameter of the same two ADARUN statements to reflect the number of the SVC used for the database defined in the above step; and

- 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 the repository file

If you used the same repository file for a version of Adabas Review older than this release, use the EXPAND3 job in the JOBS library to convert the repository.

Step 4. Convert your history data

If you used the same repository file for a version of Adabas Review older than this release, Adabas Review 4.5 requires that you convert your history data prior to running any new reports in 4.5. For complete information on doing this, read *Migration from Previous Versions*, in the *Adabas Review Release Notes*.

Install Adabas Review under Adabas

This section includes the following steps:

- Step 1. Modify the Adabas initialization parameters
- Step 2. Modify the Adabas Startup JCL

Step 1. Modify the Adabas initialization parameters

Read *ADARUN Parameters*, elsewhere in this guide, for information about the relevant ADARUN parameters. Then modify the Adabas ADARUN parameters to include the following:

- local mode only:

```
ADARUN PROGRAM=ADANUC
ADARUN REVIEW=LOCAL
```

- hub mode only for each database to be monitored by Adabas Review:

```
ADARUN PROGRAM=ADANUC
ADARUN REVIEW=hubid
ADARUN UEX5=user-exit  (optional)
```

where *hubid* is the Adabas Review hub ID and UEX5 is optional (see *Operations*, elsewhere in this guide).

Step 2. Modify the Adabas Startup JCL

Perform one of the sets of steps below, depending on whether you are installing Adabas Review in local mode or in hub mode:

- Local Mode
- Hub Mode: Client Interface Installation for a Database

Local Mode

Before you modify the Adabas startup JCL, you may need to increase the REGION parameter for the Adabas nucleus job step to accommodate Adabas Review. An increase of one megabyte is normal.

This section covers the following topics:

- RVUALT Considerations
- RVUAUT1 and RVUAUT2 Considerations

RVUALT Considerations

■ The RVUALT DD statement refers to the data set that contains the alternate history file. You may use the same data set you used for earlier versions. .

■ The MAKEALT member of the jobs library contains sample JCL to create a RVUALT data set.

> ⚠ **Caution:** Do not use IEFBR14 to allocate RVUALT.

■ If Adabas Review is installed on multiple databases, a RVUALT data set must be allocated for each database.

■ Refer to the *Operations*, elsewhere in this guide for RVUALT guidelines.

RVUAUT1 and RVUAUT2 Considerations

- The RVUAUT1 and RVUAUT2 DD statements refer to the data sets that contain the report definitions for autostarted reports. These statements point to members of a PDS; however, they may be defined to point to sequential data sets if desired.

- You can use the distributed RVUAUT1 and RVUAUT2 files from earlier versions.

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

▶ **To modify the Adabas startup JCL for local mode:**

1 Add the following DD statements to the Adabas startup JCL, replacing the *vrs* with the current version, revision, and system maintenance level number for Adabas Review:

```
//RVUEXI   DD DISP=SHR,DSN=REVvrs.SRCE(RVUEXI)
//RVUEXP   DD SYSOUT=X,LRECL=80
//RVUALT   DD DISP=SHR,DSN=REVvrs.ALTHIST
//RVUAUT1  DD DISP=SHR,DSN=REVvrs.SRCE(RVUAUT1)
//RVUAUT2  DD DISP=SHR,DSN=REVvrs.SRCE(RVUAUT2)
//RVUCARD  DD DISP=SHR,DSN=REVvrs.SRCE(RVUCARD)
//RVUFLD   DD DISP=SHR,DSN=REVvrs.SRCE(RVUFLD)
//RVUPARM  DD DUMMY
//RVUPRT00 DD SYSOUT=X,LRECL=133
//RVUPRT01 DD SYSOUT=X,LRECL=133
//RVUPRT02 DD SYSOUT=X,LRECL=133

//RVUPRT03 DD SYSOUT=X,LRECL=133
```

2 Add the Adabas Review load library to the Adabas STEPLIB concatenation.

> **Note:** To retain APF authorization for Adabas, you must authorize the Adabas Review load library as well when it is added to the Adabas STEPLIB concatenation.

Hub Mode: Client Interface Installation for a Database

▶ **To install the Adabas Review client interface, repeat the following instructions for each database to be monitored. Note that each database to be monitored must use the same SVC as the Adabas Review hub.**

1 Apply the required ZAPs.

2 Ensure that an unmodified ADALNK is available to Adabas in the Adabas load library or in a library concatenated before the Adabas load library.

ADALNK is loaded by Adabas to send information to the Adabas Review hub. Link routine exits such as RDBLXMVS or UEXB are not useful for the process of sending data to the hub and create unnecessary overhead when included in the ADALNK.

Put ADALNKs that include exits into another library.

3   Modify the Adarun parameters of the database.

4   If the Adabas Adarun parameter LOGCLEX=Y is specified to write the Review specific Command Log Extension (CLEX) to the command log, the Adabas Review library must be available in the client address space. If Review modules are not available, the warning message ARVU20 is issued.

5   Restart Adabas.

Install the Adabas Review Hub

To install the Adabas Review Hub, complete the steps described in this section:

- Step 1. Create a RVUALT data set
- Step 2. Modify the sample JCL member HUBJCL
- Step 3. Start the HUBJCL job

Step 1. Create a RVUALT data set

Use the sample JCL member MAKEALT. Do not use IEFBR14 to allocate RVUALT.

This *alternate history* file is used to contain history information if Adabas Review is unable to access the Adabas Review repository. You may use the same data set you used for Adabas Review 4.1 or 4.2. Refer to *Operations*, elsewhere in this guide, for RVUALT guidelines.

Step 2. Modify the sample JCL member HUBJCL

- Correct any library names or file names.

- Modify the ADARUN parameter REVIEW=*hubid* to reflect the target ID you plan to use for the Adabas Review hub.

- Modify the ADARUN parameter SVC to reflect the correct SVC number. This SVC 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. Read *ADARUN Parameters*, elsewhere in this guide, for information about these ADARUN parameters.

> **Note:** Software AG recommends that you set the dispatching priority of the Adabas Review hub higher than that of the sending Adabas nuclei.

- The RVUALT DD statement refers to the data set that contains the alternate history file.

- The RVUAUT1 and RVUAUT2 DD statements refer to the data sets that contain the report definitions for autostarted reports. These statements point to members of a PDS; however, they may be defined to point to sequential data sets if desired.

  You can use the distributed RVUAUT1 and RVUAUT2 files from Adabas Review 4.1.

  Note: The reports contained in the RVUAUTn files have a TARGET= parameter that specifies the database that the report will monitor. The default setting is TARGET=001. You may wish to change this setting.

Step 3. Start the HUBJCL job

Note: The STEPLIB needs to be APF-authorized.

Optional Installation Procedures

The following optional installation procedures may be completed as part of Phase 1 of the Adabas Review installation:

- Implement Support for Adabas Native SQL
- Implement Support for Reporting from Batch Natural

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.

Implement Support for Reporting from Batch Natural

This (optional) step applies both to local and hub mode installations.

▶ **To report on Natural activity from a batch Natural job:**

- Modify and relink the Adabas link routine for batch/TSO as described in *Install Adabas Review under Batch/TSO* , elsewhere in this guide.

3 Installation: Phase 2

The second phase installs the components that are specific to the particular TP monitor in use at your site. Separate procedures are used to install Adabas Review under each of the supported TP monitors:

- Com-plete

- CICS

- TSO or TSS (batch)

- IMS/DC

Install Adabas Review under Com-plete

To install the Com-plete components of Adabas Review, follow the steps in the appropriate section below.

▶ **For the Adabas Version 8 Com-plete link routine:**

1   Edit the LCOGBL link globals member found in the ADA*vrs*.MVSSRCE library, setting the LGBLSET keyword:

```
REVIEW=YES
```

2   Assemble and link the modified LCOGBL member into a load library and make it available for the next step.

3   Re-link the Adabas Version 8 Com-plete link routine using sample job LREVLCO in the Review JOBS data set, replacing the LCOGBL module with the one prepared in steps 1 and 2 and including the RDBLXCOM Review module for Com-plete.

4   Restart Adabas and Com-plete.

5   Initialize and test Adabas Review.

See **Starting Adabas Review** for information about initializing and verifying the installation of the online portion of Adabas Review.

Install Adabas Review under CICS

This section provides instructions for installing the CICS components of Adabas Review with the Adabas 8 CICS link routine.

▶ **To install the CICS components of Adabas Review for use with the Adabas Version 8 CICS link routine:**

1   Create a CICS-dependent load library.

> **Note:** If you have installed Review NM, you may use the CICS-dependent load library created for the Review NM installation.

This library is used for the output of the link. The library you create will be used exclusively by Review.

2   Modify the member CICSGBL found in the ACI*vrs*.MVSSRCE library, and set the following keywords:

```
REVIEW=YES
```

```
LUSAVE=72
```

3   Assemble and link-edit the CICSGBL member into the Review library defined in step 1 above. Be sure to include the Adabas Review exits in the link-edit with CICSGBL. In addition, be sure to include CICS module DFHEAI. A sample job, LREVLCIC, is provided in the Review JOBS data set to assist you.

4   Follow the instructions in the "Installing the Version 8 CICS Link Routines"in the Adabas Installation Manual if this is the first time the CICS link routines are being installed in this CICS system.

5   Restart Adabas and CICS.

6   Initialize and test Adabas and Review.

Read *Starting Adabas Review*, elsewhere in this guide, for information about initializing and verifying the installation of the online portion of Adabas Review.

Install Adabas Review under Batch/TSO

This section provides instructions for installing the TSO components of Adabas Review with the Adabas 8 TSO/batch link routine.

▶ **To install the TSO components of Adabas Review for the Adabas 8 TSO/batch link routine:**

1   Edit the LNKGBLS globals member found in the ADA*vrs*.MVSSRCE library, setting the LGBLSET keyword:

```
REVIEW=YES
```

2   Assemble and link-edit the modified LNKGBLS member into a load library and make it available for the next step.

3   Re-link the Adabas Version 8 TSO/batch link routine using sample job LREVLNK in the Review JOBS data set, replacing the LNKGBLS module with the one prepared in steps 1 and 2 and including the RDBLXMVS Review module for TSO.

   📄 **Note:** If you elect to use the link routine ADALNKR, link the batch Review routine RDBLXMVS to ADALNKR using sample job LREVLNKR in the Review JOBS data set.

4   Restart Adabas and TSO.

5   Initialize and test Adabas Review.

   Read *Starting Adabas Review*, elsewhere in this guide, for information about initializing and verifying the installation of the online portion of Adabas Review.

Install Adabas Review under IMS/DC

This section provides instructions for installing the IMS/DC components of Adabas Review for the Adabas 8 IMS/DC link routine.

▶ **To install the IMS/DC components of Adabas Review for the Adabas 8 IMS/DC link routine:**

1   Modify the LNIGBL member found in AII*vrs*.MVSSRCE to include the keyword:

```
REVIEW=YES
```

2   Assemble and link-edit the modified LNIGBL member into a load library and make it available for the next step.

3   Modify and link the Natural IMS/DC interface using sample job LREVLNI in the Review JOBS data set. Include the following in the link of the Natural IMS interface module:

- ADALNI and ADALNK

  > **Note:** Do not link any Adabas Review link routine exits to ADALNI and ADALNK prior to this step. Also, do not code REVIEW=YES in the LNKGBLS table linked with ADALNK for the Natural IMS module.

- RDBLXIMS, the Adabas Review IMS/DC link routine exit.

Read *Starting Adabas Review*, elsewhere in this guide, for information about initializing and verifying the installation of the online portion of Adabas Review.

4 Starting Adabas Review

This chapter describes the procedures for setting up and using Adabas Review after the installation has been completed.

Starting Adabas Review for the First Time

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

- the user profile system for controlling user access to Adabas Review; and
- the Adabas Review data file, which designates a DBID and SVC for the Adabas Review repository, and installs the supplied Adabas Review reports.

Initializing the Adabas Review User Profile System

▶ **To initialize the Adabas Review user profile system:**

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, enter INSTALL UP and press ENTER.

This initializes the Review user profile system and adds one default user record to the system. You must have this initial user defined in order to enter Adabas Review.

The following message appears when the user profile subsystem has been successfully installed:

```
Default user profile installed
```

> **Note:** The Adabas Review default user profile is delivered with the HUB / LOCL database ID set to zero. When running Adabas Review in local mode, the zero setting causes the initial database ID to be set to the same value as the Natural LFILE parameter value. However, when starting Adabas Review in hub mode, you need to modify the default user profile and reset the zero to the ADARUN REVIEW=hubid value. You can also manually override the default user profile database ID value by issuing HUB=hubid from the command line after you log on to Adabas Review.

4   At the NEXT prompt, enter MENU and press ENTER to display the main menu:

```
20:35:09                  A D A B A S  -  R E V I E W               2009-04-30
                                 Main Menu                            HUB=15690

                  Code                Description
                  ----       --------------------------------
                   AA            Available Adabas Nuclei
                   AO            Adabas Online System
                   EB            Edit Buffer Pool Report
                   EL            Edit Pulse Report
                   ER            Edit Report Definition
                   ET            Edit Target Definition
                   EX            Edit Cluster Services Report
                   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        Fin                                                     Fin
```

Initializing the Adabas Review Data File

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

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

1   At the main menu command line, enter INSTALL DB and press ENTER to display the Initial-
    ization Process window:

```
 09:34:30                   *****  R E V I E W  *****              YYYY-MM-DD
                                   Main Menu                       LOCL=00222

              +----------------------------------------------------+
              |                Initialization Process              |
              |                                                    |
              | You are about to save information into the         |
              | REVIEW repository.                                 |
              |                                                    |
              | The DBID/FNR of the REVIEW repository is           |
              | currently set to: DBID: 221                        |
              |                    FNR:  12                        |
              |                                                    |
              | If this is correct enter 'YES' to continue,        |
              | else press enter to cancel: ___                    |
              |                                                    |
              +----------------------------------------------------+


  REV00001 - WELCOME TO REVIEW RUNNING UNDER COMPLETE
  Command: install db_____
  Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9--PF10--PF11--PF12---
       Help        Exit                                                    Fin
```

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:

```
14:36:22                    *****   R E V I E W   *****              YYYY-MM-DD
                                  Main Menu                             HUB=12345

             +-------------------------------------------------+
             +-------------------------------------------------+
             |            Default Target Definition            |
             |                                                 |
             | Please enter the appropriate SVC and Version    |
             | for Adabas DBID 221:                            |
             |                                                 |
             |            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 in the SVC and version number, and press ENTER.

Based on the information you provide, Adabas Review creates the default target definition
and displays a message.

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

```
  14:37:46                    *****  R E V I E W  *****                YYYY-MM-DD
                            Initialization Process                    HUB=12345
     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:

```
 20:35:09                    A D A B A S  -  R E V I E W            2009-04-30
                                    Main Menu                           HUB=15690

                    Code                 Description
                    ----      ---------------------------------
                     AA            Available Adabas Nuclei
                     AO            Adabas Online System
                     EB            Edit Buffer Pool Report
                     EL            Edit Pulse Report
                     ER            Edit Report Definition
                     ET            Edit Target Definition
                     EX            Edit Cluster Services Report
                     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        Fin                                                    Fin
```

Verifying the Installation

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

- Errors That May Be Detected Under Com-plete
- Errors That May Be Detected Under TSO/Batch
- Errors That May Be Detected Under CICS

Errors That May Be Detected Under Com-plete

The following errors may be detected under Com-plete:

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 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 documentation to correctly add ADAPRM=ON to the Natural NATPARM parameter module.

USER BUFFER EXTENSION NOT LARGE ENOUGH AND

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 Adabas/Com-plete link routine
Action	Use the procedure in the installation documentation to correctly install the Adabas Review link routine exit in the Adabas/Com-plete 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 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 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 in the section *Initializing the Adabas Review Data File*, elsewhere in this guide, to correctly initialize the repository file.

Errors That May Be Detected Under TSO/Batch

The following errors may be detected under TSO/Batch:

USER BUFFER NOT LARGE ENOUGH

Explanation   The user buffer (UB) extension is not large enough for Adabas Review to pass data to Adabas. The parameter LRVINFO was not set correctly in the Adabas/batch link routine.

Action   Use the procedure in the installation documentation to correctly install the Adabas Review link routine exit in the Adabas/batch 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 documentation to correctly add ADAPRM=ON to the Natural NATPARM parameter module.

USER BUFFER EXTENSION NOT LARGE ENOUGH AND

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 Adabas/batch link routine.

Action   Use the procedure in the installation documentation to correctly install the Adabas Review link routine exit in the Adabas/batch 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 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 Adabas/batch link routine currently being executed.

Action   Use the procedure in the installation documentation to correctly install the Adabas Review link routine exit in the Adabas/batch 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 in the section *Initializing the Adabas Review Data File*, elsewhere in this guide, to correctly initialize the repository file.

Errors That May Be Detected Under CICS

The following errors may be detected under CICS:

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 Adabas/CICS link routine.
Action	Use the procedure in the installation documentation to correctly install the Adabas Review link routine exit in the Adabas/CICS 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 documentation to correctly add ADAPRM=ON to the Natural NATPARM parameter module.

USER BUFFER EXTENSION NOT LARGE ENOUGH AND ...

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 Adabas/CICS link routine.
Action	Use the procedure in the installation documentation to correctly install the Adabas Review link routine exit in the Adabas/CICS 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 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 Adabas/CICS link routine currently being executed.
Action	Use the procedure in the installation documentation to correctly install the Adabas Review link routine exit in the Adabas/CICS 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 in the section *Initializing the Adabas Review Data File*, elsewhere in this guide to correctly initialize the repository file.

5 Operations

This chapter describes operational procedures and processes for Adabas Review after it has been installed and initialized.

Processing Abends

> Note: This section applies only when using Adabas Review in local mode.

If Adabas Review processing terminates abnormally (abends) in RAOSLOCL, the Adabas Review ESTAE routine is given control.

This routine traps the abend, and prints diagnostic information and a dump to expedite the analysis and resolution of the abend to ADASNAP.

The routine also disables Adabas Review processing for the remainder of the Adabas nucleus session.

If you need help resolving the abend, contact your Software AG technical support representative with the printed information.

- Abend Protection for Adabas
- Message to Adabas Review users
- Messages to the Console

Abend Protection for Adabas

Adabas is protected from termination if Adabas Review abends. Adabas processing continues without interruption.

> Note: Although Adabas is temporarily unavailable during dump processing, it continues processing as usual once the dump has completed.

Message to Adabas Review users

Users attempting to access Adabas Review following a trapped abend receive the following message:

```
Review not installed on database
```

Messages to the Console

The progress of the error handling routine is reported by messages written to the console. For z/OS, the following are example sequences of console messages sent during abend processing:

```
REV20122 - REVIEW ESTAE EXIT DRIVEN
REV20122 - REVIEW NOW DISABLED
REV20122 - ABEND 000C1000 PSW 078D2000 80129E98
REV20122 - R0  00000002 - R1  0D652DD0 - R2  000FD240 - R3  000FBCC0
REV20122 - R4  00129C48 - R5  0D50AFA8 - R6  0D6E8000 - R7  001331F8
REV20122 - R8  0D50B0E8 - R9  800E93E0 - R10 00042000 - R11 0D5007E0
REV20122 - R12 80128C48 - R13 00128D68 - R14 001294BA - R15 8000DD10
REV20122 - DUMP HAS BEEN TAKEN
REV20126 - REVIEW SUB-TASK DETACHED
REV20129 - HISTORY SUB-TASK DETACHED
```

Adding Adabas Startup Statements at Installation

> **Note:** This section applies only when using Adabas Review in local mode.

Statements must be added to the Adabas startup job to accommodate Adabas Review. These statements are added during the installation of Adabas Review.

The added statements control many of the operating features of Adabas Review. Some identify parameter files that may be edited by the Review administrator.

The startup statements may be edited, or additional statements may be needed, depending upon the needs of your site. However, deleting any of these statements affects the functioning of Adabas Review and is, therefore, not recommended.

Adabas Startup Statements

The following is a listing of the statements added to the Adabas startup job during Adabas Review installation.

For z/OS, the following statements are added to the Adabas startup JCL:

```
//RVUEXI   DD DISP=SHR,DSN=REVvrs.SRCE(RVUEXI)
//RVUEXP   DD SYSOUT=X,LRECL=80,RECFM=FBA
//RVUALT   DD DISP=SHR,DSN=REVvrs.ALTHIST
//RVUAUT1  DD DISP=SHR,DSN=REVvrs.SRCE(RVUAUT1)
//RVUAUT2  DD DISP=SHR,DSN=REVvrs.SRCE(RVUAUT2)
//RVUCARD  DD DISP=SHR,DSN=REVvrs.SRCE(RVUCARD)
//RVUFLD   DD DISP=SHR,DSN=REVvrs.SRCE(RVUFLD)
//RVUPARM  DD DUMMY
//RVUPRT00 DD SYSOUT=X,LRECL=133,RECFM=FBA
```

```
//RVUPRT01 DD SYSOUT=X,LRECL=133,RECFM=FBA
//RVUPRT02 DD SYSOUT=X,LRECL=133,RECFM=FBA
//RVUPRT03 DD SYSOUT=X,LRECL=133,RECFM=FBA
//ADASNAP  DD SYSOUT=X
```

, where *vrs* is the current version, revision, and system maintenance level of Adabas Review.

The Adabas startup statements listed above identify files that are used by Adabas Review. Each of these files is described in the following section, *Files Used by Adabas Review*.

Files Used by Adabas Review

This section describes the files used by Adabas Review:

- RVLOG01 and RVLOG02 Command Logging Files
- RVSUM01 and RVSUM02 Summary Logging Files
- RVUALT History File
- RVUAUT1 and RVUAUT2 Report Definition Data Sets
- RVUCARD Data Set for the GENCARD Command
- RVUEXI Parameter File
- RVUEXP Companion Output File
- RVUFLD User Field Parameter Data Set
- RVUPARM Dummy Data Set
- RVUPRTnn Logical Printer Files

RVLOG01 and RVLOG02 Command Logging Files

RVLOG01 and RVLOG02 are the default names for the sequential command logging files. 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 for a particular report must be the same size.

Adabas Review allows each report to have up to 99 command log files and writes to these files in sequential order. A DD statement must be added to the JCL for each command log file. The names of these command log files are made up of the file name prefix and a sequential number. The data sets for these command log files may be allocated using IEFBR14 with the following DCB attributes:

```
RECFM=VB,BLKSIZE=10000,LRECL=9996,DSORG=PS
```

> **Note:** While RECFM and DSORG cannot be altered, the combination of LRECL and BLKSIZE can be altered (for example, LRECL=27998, BLKSIZE=27994) to make better use of disk storage.

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

RVSUM01 and RVSUM02 Summary Logging Files

RVSUM01 and RVSUM02 are the default names for the sequential summary logging files. 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 for a particular report must be the same size.

Adabas Review allows each report to have up to 99 summary log files and writes to these files in sequential order. A DD statement must be added to the JCL for each summary log file. The names of these summary log files are made up of the file name prefix and a sequential number. The data sets for these summary log files may be allocated using IEFBR14 with the following DCB attributes:

```
RECFM=VB,BLKSIZE=10000,LRECL=9996,DSORG=PS
```

> **Note:** While RECFM and DSORG cannot be altered, the combination of LRECL and BLKSIZE can be altered (for example, LRECL=27998, BLKSIZE=27994) to make better use of disk storage.

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

RVUALT History File

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.

A RVUALT job control statement can identify an alternate sequential file to which historical data may be written when it cannot be written to the Adabas Review repository.

- In hub mode, the Adabas Review hub startup JCL contains a RVUALT statement.

- In local mode, the Adabas startup JCL must be modified to include a RVUALT statement during the Adabas Review installation procedure.

RVUALT data sets must be allocated:

- In hub mode, a separate RVUALT data set must be allocated for each Adabas Review hub.

■ In local mode, if Adabas Review is installed on multiple databases, an RVUALT data set must be allocated for each database.

The RVUALT history file is allocated using the following DCB attributes:

```
RECFM=VB,BLKSIZE=10000,LRECL=9996,DSORG=PS
```

⛔ **Caution:** Use IEBGENER to allocate the RVUALT file, since an EOF (end-of-file) must be written for the file. Allocation with IEFBR14 will not write the EOF mark. In hub mode, the sample JCL member MAKEALT will do this.

Adabas Review receives a response code 148 (Adabas not active) and writes the data to the file specified by the RVUALT job control statement (if it has been assigned in the job stream) in situations where the Adabas Review repository is:

■ unavailable (in hub mode).

■ on the same database that is being monitored (in local mode). The response code is returned when the database is brought down and Adabas Review tries to write the historical data.

The next time the Adabas Review hub is started, another subtask is started to copy the historical data from the RVUALT file to the Adabas Review repository.

RVUAUT1 and RVUAUT2 Report Definition Data Sets

RVUAUT1 and RVUAUT2 are data sets that contain the report definition control statements for autostarted reports. Adabas Review generates the statements and writes them to these files. When Adabas is initialized, the reports are started automatically.

The installation procedure for z/OS defines DD statements RVUAUT1 and RVUAUT2 so that they point to members of a PDS. To avoid constant compression of these data sets, the DD statements may be modified to point to sequential data sets.

📄 **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 for the GENCARD Command

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

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 the section *Editing the RVUEXI Parameter File*, elsewhere in this guide, 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 contains parameter control statements for creating user-defined fields. Parameters in this data set define the length, type, and location of reporting fields to be determined by the user.

RVUPARM Dummy Data Set

The recommended procedure is to set RVUPARM to "dummy". 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 if desired, and Adabas Review will access this data set prior to accessing data sets specified by RVUAUT1 and RVUAUT2.

When RVUPARM has been "dummied", the following message is displayed:

```
REV20164 - Open failed for RVUPARM
```

In this case, the message is normal and should be ignored. The message does not occur if instead you create a RVUPARM data set that contains only an asterisk.

RVUPRTnn Logical Printer Files

The following logical printer files are used by Adabas Review:

- RVUPRT00 for Adabas Review Statistics

- RVUPRTnn Files for Reports

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.

RVUPRTnn Files for Reports

RVUPRT01, 02, ... *nn*

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 (in local mode, to the Adabas) startup job control (JCL).

Assignment of reports to logical printers is as follows:

- Review statistics are written to RVUPRT00.

- Summary reports are written to RVUPRT01.

- The first detail report is written to RVUPRT02

- Additional detail reports begin at RVUPRT03 and increment the printer number for each additional report. 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

The RVUEXI file 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.

This section covers the following topics:

- RVUEXI User-Specified Parameter
- RVUEXI Timeout Parameters

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 eight-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 Review receives the first call from each user. The area is deallocated when Review receives an Adabas CLOSE (CL) command for that user.

However, if the user's application does not issue a CL during termination, 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, 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

- Using the Command Logging User Exit

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. Command log data sets 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 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 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
- Using the Summary Logging User Exit

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. Summary log data sets must be allocated for summary 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 command logs. For example, if the name is "SMLOG" and there are two data sets 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 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 these parameters:**

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

2   Type EDIT CONFIGDB and press ENTER.

3   After modifying the parameters, 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, which contains the Adabas Review configuration parameters, 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	NAT|*char*	NAT

Specifies the decimal character to use when generating Review reports. The value specified overrides the value specified for the NATPARM DC parameter. If the value specified is NAT then the value specified in the NATPARM DC parameter is used. To determine the current setting of the NAT-PARM DC parameter, issue GLOBALS at the NEXT prompt.

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

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

Parameter	Possible Values	Default
RVBX-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 4 or greater for z/OS.

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.

Review Natural User Exits

Adabas Review has two Natural user exits. These exits are located 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 ADARUN Parameters for Adabas Review in z/OS

ADARUN performs the following functions:

▪ Loads the ADAIOR module, which performs all database I/O and other functions that depend on the operating system.

▪ Interprets the ADARUN parameter statements; then loads and modifies the appropriate Adabas nucleus or utility modules according to the ADARUN parameter settings.

▪ Transfers control to Adabas.

The ADARUN statement, normally a series of entries each specifying one or more ADARUN parameter settings, is specified in the DDCARD data set for z/OS. For more specific job information, refer to the appropriate chapter in this manual.

The ADARUN control statement defines and starts the Adabas operating environment. The ADARUN control statement also starts Adabas utilities.

The ADARUN parameters described in this chapter apply specifically to Adabas Review.

This chapter describes the ADARUN parameters that apply to the Adabas nucleus and the Adabas Review Hub in z/OS environments.

ADARUN Parameter Syntax

The syntax for the ADARUN statement and parameters is:

```
ADARUN parameter=value,...
```

In this syntax, *parameter=value* is one or more of the ADARUN parameters described in this section.

Any number of blanks is permitted between "ADARUN" and the first parameter, but no blanks are permitted within the *parameter=value* string. Commas (,) must be used as separators. A blank following a *parameter=value* entry indicates the end of the statement.

The literal "ADARUN" must be entered in positions 1-6 of each ADARUN statement. All *parameter=value* entries must end before position 73. Any *parameter=value* entries that would extend beyond position 72 must be coded on a new statement as shown below. The comma following the last *parameter=value* entry of a statement is optional, and is not interpreted as a continuation character. Positions 73-80 are ignored. An asterisk (*) in position 1 indicates a user comment line.

The following example summarizes the ADARUN statement format. The first statement cannot continue beyond position 72. The second statement represents a continuation of the first statement. All ADARUN continuation statements have the same format and restrictions as the first statement.

Positions 1-6	Positions 8-72
ADARUN	*parameter=value.parameter=value,...*
ADARUN	*parameter=value*

The ADARUN parameters are summarized in the following table, and described in detail in the section following the table.

Unless noted otherwise, each parameter has a default value that ADARUN uses if the parameter is not specified.

PROGRAM Parameter: Program to Run

Parameter	Specify:	Possible Values	Default
PROGRAM	the program to be executed.	see table below	USER

This parameter specifies what to execute. The possible values are described in the following table:

Specify:	To start:
ADACOM	an ADACOM task (used in Adabas Cluster Services and Adabas Parallel Services environments) For more information, refer to your Adabas Cluster Services and Adabas Parallel Services documentation.
ADANUC	an Adabas nucleus For more information about executing an Adabas nucleus, read *Adabas Session Execution*, in the *Adabas Operations Manual*.
ADAREV	an Adabas Review hub. Specify this in conjunction with the ADARUN REVIEW parameter. For more information, refer to your Adabas Review documentation.
NETWRK	an Entire Net-Work node For more information, refer to your Entire Net-Work documentation.
RENTUSER	a user program to be run using a reentrant Adabas batch/TSO link routine. For more information, refer to description of the Adabas TP monitor installation in your Adabas installation documentation.
USER	a user program to be run using a non-reentrant Adabas batch/TSO link routine. For more information, read *Linking Applications to Adabas*, in the *Adabas Operations Manual*
utility-name	an Adabas utility Specify an Adabas utility for *utility-name*. For more information, refer to the *Adabas Utilities Manual*.

Examples

The following example specifies that an Adabas nucleus is running.

```
ADARUN PROGRAM=ADANUC
```

The following example specifies that an Adabas Review hub is running.

```
ADARUN PROGRAM=ADAREV, REVIEW=202
```

The following example specifies that an Entire Net-Work node is running.

```
ADARUN PROGRAM=NETWRK
```

REVIEW Parameter: Adabas Review Control

Parameter	Specify . . .	Possible Values	Default
REVIEW	whether to run Adabas Review in local or hub mode specifying the hub ID, or not at all.	NO | <u>LOCAL</u> | dbid	NO

> **Note:** The parameter name REVIEWHUBID is a synonym for REVIEW, provided to ensure downward compatibility with past Adabas releases. We recommend that you use the parameter name REVIEW instead, wherever possible.

REVIEW controls the use of the Adabas Review product:

Value	Meaning
NO	The default setting. Adabas Review is not started.
<u>LOCAL</u>	Adabas Review is started in local mode running as an extension to ADALOG.

In local mode, Adabas Review job control statements should be added to the Adabas nucleus startup JCL.

> **Note:** If an Adabas Review load library is not included in the startup JCL, the REVIEW parameter is automatically changed from LOCAL to NO.

dbid   Adabas Review is started in hub mode. The physical database ID that you specify for the hub identifies

- the hub (server) itself (with PROGRAM=ADAREV) that is being started; or

- from an Adabas nucleus (client), the hub that is the target for Adabas Review processing for that nucleus (with PROGRAM=ADANUC).

In hub mode, Adabas Review job control statements should be added to the Adabas Review hub startup JCL.

Dynamic Modification

The setting of the ADARUN PROG=ADANUC,REVIEW=dbid parameter can be changed dynamically using the REVIEWHUBID command from the operator console, the ADADBS OPERCOM REVIEWHUBID function, or the Modify Parameter function of Adabas Online System.

Examples

The following example starts hub 202 for the Adabas Review hub (server) installation.

```
ADARUN PROGRAM=ADAREV,REVIEW=202
```

The following example starts the Adabas nucleus that will log to Adabas Review hub 202 for the Adabas Review (client) installation.

```
ADARUN PROGRAM=ADANUC,REVIEW=202
```

CT Parameter: Command Timeout Limit

Parameter	Specify . . .	Minimum	Maximum	Default
CT	the maximum time (seconds) for interregion communication of results from Adabas to the user.	1	16777215	60

For Adabas Review, this is the maximum number of seconds (more precisely, units of 1.048576 seconds) that can elapse from the time an Adabas Review hub command has been completed until the results are returned to the user through the interregion communication (operating-system-dependent).

This parameter is used to prevent a command queue element and attached buffer from being held for a long period of time for a user who has terminated abnormally.

Possible causes of a command timeout are

- user region is swapped out or cannot be dispatched;
- user is cancelled;
- user has low priority in high activity system.

If the CT limit is exceeded,

- the command queue element and attached buffer are released;
- a message ADAM93 is printed; and
- if the user has not terminated, response code 254 is returned to the user program.

Example

The following example permits about 30 seconds to obtain a result through interregion communication from the Adabas Review hub

```
ADARUN PROG=ADAREV,CT=30
```

FORCE Parameter: Allow Nucleus Database ID or Review Hub Table Entry Overwrite

Parameter	Specify . . .	Possible Values	Default
FORCE	whether the nucleus or Adabas Review hub can overwrite an existing ID table entry.	YES	NO	NO

If running Adabas Review, this indicates whether the Adabas Review hub can overwrite an existing ID table entry. When a Review hub starts up, ADARUN scans the ID table to ensure that no entry exists for the Review hub. You can use the FORCE parameter to indicate whether the Review hub can overwrite an existing ID table entry.

The ID table entry is derived from the database ID and the job name. For Adabas Review, the ID table entry is derived from the Review hub ID (REVIEW=). The ID table entry is deleted when the nucleus terminates normally.

The FORCE parameter allows the nucleus or Adabas Review hub to overwrite the existing ID table entry and access the database.

🚫 **Caution:** Do not use the FORCE parameter unless absolutely necessary, or the integrity of the database could be lost. Ensure that no nucleus or Review hub is active for the ID table entry being overwritten.

Value	Meaning
YES	The nucleus or Adabas Review hub that is starting can overwrite an existing ID table entry. FORCE=YES is required when restarting a session that terminated abnormally with an ADAM98 message. In this case, the ID table still contains an active entry for the nucleus or Review hub. Overwriting the existing entry by specifying FORCE=YES prevents further communication to the overwritten nucleus or hub and causes loss of cross-memory environment resources, which cannot be restored until the next IPL.
NO	(default) If the ID table contains an entry for the nucleus or Adabas Review hub that is starting, the nucleus is denied access to the database or the Review hub is not permitted to start.

📄 **Note:** In an Adabas Cluster Services or Adabas Parallel Services environment, the FORCE parameter applies to the NUCID, rather than the database ID, because a cluster nucleus builds an ID table entry for the NUCID.

A data integrity block (DIB) entry will only be removed once the ID Table initialization has been successful. Therefore, you must set IGNDIB and FORCE both to "YES" if either of the following occur:

■ You receive a PARM ERROR 26 after parameter settings IGNDIB=NO and FORCE=YES were applied;

■ You receive a PARM ERROR 23 after parameter settings IGNDIB=YES and FORCE=NO were applied.

Examples

The following example specifies that if the ID table contains an active entry for DBID 7, overwrite the entry.

```
ADARUN PROG=ADANUC,FORCE=YES,DBID=7
```

The following example specifies that if the ID table contains an active entry for the Adabas Review hub, overwrite the entry.

```
ADARUN PROG=ADAREV,FORCE=YES,REVIEW=202
```

LOCAL Parameter: Local Nucleus or Adabas Review Hub

Parameter	Specify . . .	Possible Values	Default
LOCAL	whether an Adabas nucleus or Adabas Review hub is isolated and available for local use only.	YES | NO	YES

Defines an isolated Adabas nucleus or Adabas Review hub that is only available locally. The nucleus or hub is unknown to Entire Net-Work. A nucleus or Adabas Review hub specifying LOCAL=YES (the default) can have the same database ID or hub ID as another database nucleus or Review hub on another network node.

Value	Meaning
YES	Isolates this nucleus or Adabas Review hub (that is, makes it unaddressable) from other Entire Net-Work nodes.
NO	Allows the nucleus or Adabas Review hub to receive calls from other Entire Net-Work nodes.

Example

In the following example, the Adabas nucleus is isolated and cannot be addressed by other Entire Net-Work nodes.

```
ADARUN PROG=ADANUC,LOCAL=YES
```

NAB Parameter: Number of Attached Buffers

Parameter	Specify . . .	Minimum	Maximum	Default
NAB	the number of attached buffers to be used.	1	varies, depending on the amount of available virtual storage	16

The NAB parameter defines the number of attached buffers to be used during the session. An attached buffer is an internal buffer used for interregion communication. It is required in all environments. Adabas allocates an attached buffer pool with a size equal to the value of NAB multiplied by 4096 bytes.

You may specify as many attached buffers as fit into the available virtual storage.

In environments running in 31-bit addressing mode, the attached buffer pool space is allocated above the 16-MB line.

The NAB parameter syntax is:

```
NAB={ n | 16 }
```

Specific Product Recommendations

■ For Event Replicator Server databases, set parameter NAB to a value greater than or equal to: 41 * 10 * *the-number-of-Adabas-nuclei-sending-data-to-the-Event-Replicator-Server*.

For example, if one Adabas nucleus will be sending data to the Event Replicator Server, set the NAB parameter greater than or equal to 410 (for example NAB=420).

■ If data is sent through Entire Net-Work from one or more Adabas nuclei to an Event Replicator Server, the Entire Net-Work NAB parameter must also be set to a value greater than or equal to: 41 * 10 * *the-number-of-Adabas-nuclei-sending-data-to-the-Event-Replicator-Server*.

■ If the Event Replicator Server is set to support updates by multiple concurrent users to Adabas targets (when the NPADACALLS initialization parameter is set to any value greater than "1"), consider adjusting the value of this parameter in the target Adabas nucleus to ensure the target nucleus can handle updates from multiple concurrent users.

■ Users of the Adabas Review hub should read *Storage Requirements* in the *Adabas Review Concepts Manual* for more information about the space requirements of the Command Queue for Adabas Review.

Example

The following example runs the Adabas Review hub nucleus with 50 attached buffers.

```
ADARUN PROG=ADAREV,NAB=50
```

NC Parameter: Number of Command Queue Elements

Parameter	Specify . . .	Minimum	Maximum	Default
NC	the maximum number of command queue elements.	20	32767	200

The number of command queue elements (CQEs) established for the Adabas or Review hub session determines the maximum number of Adabas commands that may be queued or be in process at any one time during the session.

Each call from the Adabas nucleus is assigned a CQE. The CQE is released when the user receives the results of the command, the Adabas Review hub has processed the command, or the user has been timed out..

192 bytes are required for each CQE.

Software AG recommends that you set NC high enough to allow one command per active user for possible synchronization during execution of the online SAVE database function of the ADASAV utility.

The Adabas session statistics or Adabas Online System can be used to tune this parameter for the next session.

For more information about the space requirements of the Command Queue for Adabas Review, refer to *Storage Requirements* in the *Adabas Review Concepts Manual*.

Specific Product Recommendations

- For Event Replicator Server databases, set parameter NC to a value greater than or equal to: 10 * *the-number-of-Adabas-nuclei-sending-data-to-the-Event-Replicator-Server*. For example, if one Adabas nucleus will be sending data to the Event Replicator Server, set the NC parameter greater than or equal to 10 (for example NC=20).

- If data is sent through Entire Net-Work from one or more Adabas nuclei to an Event Replicator Server, the Entire Net-Work NC parameter must also be set to a value greater than or equal to: 10 * *the-number-of-Adabas-nuclei-sending-data-to-the-Event-Replicator-Server*.

- If the Event Replicator Server is set to support updates by multiple concurrent users to Adabas targets (when the NPADACALLS initialization parameter is set to any value greater than "1"), consider adjusting the value of this parameter in the target Adabas nucleus to ensure the target nucleus can handle updates from multiple concurrent users.

Example:

Run the Adabas nucleus with a maximum of 500 elements in the command queue.

```
ADARUN PROG=ADANUC,NC=500
```

The following example runs the Adabas Review hub nucleus with a maximum of 500 elements in the command queue.

```
ADARUN PROG=ADAREV,NC=500
```

REVFILTER Parameter: Review Record Filtering Control

Parameter	Specify . . .	Possible Values	Default
REVFILTER	whether to allow Adabas Review record filtering during the session.	YES | NO	YES

REVFILTER determines whether command log record filtering may be activated. Filtering can decrease the number of command log records passed to Review for report processing.

Value	Meaning
YES	The default setting. Database command log records may be filtered from report processing, depending upon Review report rules.
NO	All command log records will be passed to Review for report processing.

Examples

In the following example, Adabas Review's record filtering may be activated during the Adabas nucleus session.

```
ADARUN PROG=ADANUC,REVFILTER=YES
```

In the following example, Adabas Review's record filtering will not be in effect for the Adabas nucleus session.

```
ADARUN PROG=ADANUC,REVFILTER=NO
```

REVLOGBMAX Parameter: Logged Buffer Size Limit for Review

Parameter	Use	Values	Default
REVLOGBMAX	Specify the maximum allowable number of bytes of a logged buffer for Review.	Any integer ranging from 0 to 30000	5120

If a buffer is longer than this value, the logged buffer is truncated from the point at which its size exceeds the setting of the REVLOGBMAX parameter. The REVLOGBMAX setting affects the ADARUN LOGGING parameter specifications only for both CLOGLAYOUT=8. The minimum value (368) is the size of the length of the CLOGLAYOUT=8 basic record plus the length of the extended Adabas control block (ACBX).

Example

The following example runs the Adabas nucleus using a logged buffer size limit of 512. Individual logged buffers, such as the format buffer for an Adabas command, will be truncated if they exceed 512 bytes.

```
ADARUN PROG=ADAREV,LOGBMAX=512
```

REVLOGMAX Parameter: Total Logged Buffer Size Limit for a Review Command

Parameter	Use	Values	Default
REVLOGMAX	Specify the maximum size of all of the logged buffers allowed for an Adabas Review command.	Any integer ranging from 2000 to 32768 (32K).	16384

When the sum of sizes of the logged buffers for an Adabas Review command reaches the value of the REVLOGMAX parameter, the buffer exceeding the limit is truncated and all following buffers are omitted. The size of REVLOGMAX must at least be as large as the REVLOGBMAX + 2000 in order to accommodate the largest buffer of the Adabas command. The minimum value (2000) is the size of the length of the CLOGLAYOUT=8 basic record plus the length of the extended Adabas control block (ACBX) and the CLEX information.

The CLOGMAX setting affects the ADARUN LOGGING parameter specifications only for CLOGLAYOUT=8.

Example

The following example runs the Adabas nucleus using a command logged buffer size limit of 32000 bytes. The sum of all logged buffers for an Adabas Review command to this nucleus cannot exceed 10000 bytes.

```
ADARUN PROG=ADAREV,REVLOGMAX=10000
```

SVC Parameter: SVC Number

This parameter applies to the operating environments z/OS and z/VSE only.

Parameter	Specify . . .	Possible Values	Default
SVC	the Adabas SVC number or Adabas Review hub SVC number to be used for the session.	see text	45 (z/VSE) 249 (z/OS)

The SVC number is specified as an integer. It must correspond to the number used for the Adabas SVC at your installation.

The Adabas SVC or Adabas Review hub SVC are used to perform various Adabas internal functions under z/OS and z/VSE.

Valid SVC values are as follows:

z/OS	200-255
z/VSE	45 is recommended; any free SVC value can be used. See the Adabas Installation documentation for information about finding free values for z/VSE.

Example

The following example runs an Adabas session under z/OS using SVC 202 for the Adabas SVC.

```
ADARUN PROG=ADANUC,SVC=202
```

The following example runs an Adabas Review hub session under z/VSE using SVC 45 for the Adabas Review hub SVC.

```
ADARUN PROG=ADAREV,SVC=45
```

7 Operator Commands (Hub Mode Only)

Note: The commands described in this chapter are used only in hub mode.

The commands in this chapter are used to control Adabas Review (ADAREV) in hub mode. 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.

In this chapter, the commands are listed alphabetically.

Entering Operator Commands

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

▶ **To enter operator commands in z/OS environments:**

■ Use the OS MODIFY (F) command as shown below:

```
F jobname,command
```

Substitute the name specified by the EXEC job control statement (usually "ADARUN") for *jobname*.

Operator Command Overview

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

- ADAEND
- CANCEL
- DCLIENT
- DCQ
- DNC
- STARTCLIENT
- STOPCLIENT

■ Adabas Operator Commands

ADAEND

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

CANCEL

Used to terminate ADAREV immediately; the Review nucleus is abnormally terminated and the job aborts with a user completion code of 253.

DCLIENT

DCLIENT = { *dbid* | ALL}

Displays information on the specified client or "ALL" clients. The DCLIENT displays the number of clients currently registered with the Review hub plus the individual status of each client, including the client's DBID, time of last activity, whether the client has any active reports and if buffers are required from the client, the number of reports (and of these, how many reports require buffer information), and the total number of monitoring data records received from the client. The following is an example of the message output:

```
REVH13 00205 Dbid   Nucid Last-act Rpt Buf Rpts Wbuf   Log-records
REVH13 00205 00203         --:--:--  Y   N  0001 0000             0
REVH13 00205 00204         --:--:--  Y   N  0001 0000             0
```

DCQ

Used 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 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

Used to display the number of queued requests currently in the command queue.

STARTCLIENT

STARTCLIENT = { *dbid* **| ALL }**

Used to initiate a change order command to the specified client or "ALL" clients informing the client(s) to begin sending monitoring data to the Review 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

STOPCLIENT = { *dbid* | ALL }

Initiate a change order command to the specified client or "ALL" clients informing the client(s) 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

Terminate the Adabas session normally. No new users are accepted after this command has been issued. ET logic updating is continued 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

Terminate 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.

Index

D

data file, initializing, 31
DCLIENT operator command, 72
DCQ operator command, 72
DECIMAL-CHAR parameter, CONFIGDB file, 53
Default Target Definition screen, 32
displaying
    client information, 72
    list of queued requests, 72
    number of queued requests, 72
DNC operator command, 72

E

EDIT CONFIG command, 53
EDIT CONFIGDB command, 53
entering operator commands in z/OS environments, 70

F

files
    command logging, 44
    summary logging, 45
FORCE
    ADARUN parameter, 62

H

hub mode, operator commands, 70
hub server
    attached buffer storage requirements, 4
    command queue storage requirements, 3
    storage requirements, 2

I

ID Table
    parameter to
        allow nucleus to overwrite existing entry, 62
IMS/DC, z/OS installation
    z/OS installation, 26
initialization
    data file, 31
    user profile system, 30
Initialization Process screen, 33
Initialization Process window, 31
INSTALL command, 30, 31
installation
    adding Adabas startup statements, local mode, 43
    jobs library members, 10
    MSP preparation, 1
    non-TP-specific components, local mode, 14
    overview, 11
    source library members, 10
    space requirements, 9
    tape description, 8
    TP-specific components, 23
    under Natural, 14
    verifying, 35
        under CICS, 38
        under Com-plete, 35
        under TSO/batch, 37
    z/OS

Adabas Native SQL support, 21
Adabas Review repository, 16
hub, 20
hub mode, 11
local mode, 11
support for reporting from batch Natural, 21
under Adabas, 17
under CICS, 25
under Com-plete, 24
under IMS/DC, 26
z/OS preparation, 1

J

jobs library members, 10

L

LOCAL
    ADARUN parameter, 63

M

Main Menu, 34
MAXIMUM-MAXK parameter, CONFIGDB file, 54
MAXSTORE
    report parameter, 6
MSP, installation
    preparation, 1

N

NAB
    ADARUN parameter, 64
NATPARM, parameter settings, 15
Natural
    NTFILE definition, 15
    required parameter settings, 15
    user exits, 55
    z/OS installation, support for reporting from batch, 21
NC
    ADARUN parameter, 65
nucleus
    isolated
        parameter to define as a local nucleus, 63
    SVC for
        parameter to specify, 67

O

OPEN-DBID parameter, CONFIGDB file, 55
operator commands
    ADAEND, 71, 74
    CANCEL, 71, 74
    DCLIENT, 72
    DCQ, 72
    DNC, 72
    entering in z/OS environments, 70
    STARTCLIENT, 73
    STOPCLIENT, 74