9 software

Adabas Review

Installation and Operations for z/OS

Version 4.3.2

September 2009



This document applies to Adabas Review Version 4.3.2 and to all subsequent releases.

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

Copyright $\ensuremath{\mathbb O}$ Software AG 2009. All rights reserved.

The name Software AG, webMethods and all Software AG product names are either trademarks or registered trademarks of Software AG and/or Software AG USA, Inc. Other company and product names mentioned herein may be trademarks of their respective owners.

Table of Contents

| 1 Installation and Operations for z/OS | 1 |
|--|------|
| 2 Preparing For the Installation | 3 |
| Prerequisites | 4 |
| Using the Adabas Review Installation Tape | 5 |
| Installation Overview | 8 |
| 3 Installation: Phase 1 | 9 |
| Install Adabas Review under Natural | . 10 |
| Install the Adabas Review Repository | . 13 |
| Install Adabas Review under Adabas | . 14 |
| Install the Adabas Review Hub | . 17 |
| Optional Installation Procedures | . 19 |
| 4 Installation: Phase 2 | . 21 |
| Install Adabas Review under Com-plete | |
| Install Adabas Review under CICS | . 23 |
| Install Adabas Review under TSO | . 24 |
| Install Adabas Review under IMS/DC | . 25 |
| 5 Starting Adabas Review | |
| Starting Adabas Review for the First Time | . 28 |
| Accessing Adabas Review | |
| Verifying the Installation | . 33 |
| 6 Operations | . 39 |
| Processing Abends | . 40 |
| Adding Adabas Startup Statements at Installation | . 41 |
| Files Used by Adabas Review | . 42 |
| Editing the RVUEX1 Parameter File | . 46 |
| Command Logging Considerations | . 47 |
| Modifying Configuration Parameters | . 50 |
| User Exit 5 Adabas Review Hub Event Handler | . 52 |
| Review Natural User Exits | . 54 |
| 7 ADARUN Parameters | . 55 |
| ADARUN Functions | . 56 |
| ADARUN Parameter Syntax | . 56 |
| ADARUN Parameters | |
| 8 Operator Commands (Hub Mode Only) | . 65 |
| Entering Operator Commands | |
| Operator Command Overview | . 66 |
| Index | . 71 |
| | |

1 Installation and Operations for z/OS

Adabas Review is a set of tools for monitoring the performance of Adabas environments and the applications executing within them. Information retrieved about Adabas usage helps you tune application programs to achieve maximum performance with minimal resources.

This document provides information for installing and maintaining Adabas Review in either of the following modes:

- local mode in the Adabas address space
- hub mode as a hub (server) in its own address space with only interface (client) modules in the Adabas address space

This document is organized as follows:

| ٢ | Preparing For the Installation | Describes installation prerequisites, installation tape information, and provides an overview of the Adabas Review installation process for z/OS and OS/390 systems. |
|---|--------------------------------------|---|
| ٢ | Installation Phase 1 | Describes the first phase of the Adabas Review installation process. Phase 1 comprises all the steps that are independent of any particular TP monitor environment. |
| ٢ | Installation Phase 2 | Describes the second phase of the Adabas Review installation process. Phase 2 installs the components that are specific to the particular TP monitor in use at your site. |
| ٢ | Starting Adabas Review | Describes how to set up and get started using Adabas Review after the installation has been completed. |
| ٩ | Operations | Describes operational procedures and processes for Adabas Review. |
| ٩ | ADARUN Parameters | Describes the ADARUN parameter specific to Adabas Review. |
| ٢ | Operator Commands (Hub Mode Only) | Describes the commands used to control Adabas Review in hub mode. |

Preparing For the Installation

| Prerequisites | . 4 |
|---|-----|
| Using the Adabas Review Installation Tape | . 5 |
| Installation Overview | . 8 |

This chapter provides installation preparation information for Adabas Review 4.3.2 or above under OS/390 or z/OS and FACOM OS IV/MSP-EX operating system environments. All references in this chapter to OS/390 are valid for z/OS and MSP as well, unless otherwise noted.

If you are also installing Review Data Communication or Review Natural Monitor, refer to the installation manual for that system. Note that the Adabas Review menu system has been completely disconnected from these products. The User Profile system that was formerly common to all of these products is now independent for each. Adabas Review profile data is now encrypted for enhanced security.

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

If you are using SMA to install Adabas Review 4.3.2 or above under CICS, and you want to use the Adabas command-level link routine, set the CMD-LEVEL-LINK parameter in group OPTION to Y. This will ensure that the desired command-level link is assembled and linked with the correct Adabas Review TP interface module. Refer to the SMA P060 README job member for more detailed information about this and other SMA installation steps.

This chapter covers the following topics:

Prerequisites

Adabas Review 4.3.2 or above has the following installation requirements in OS/390, z/OS, z/OS.e, and OS IV/MSP-EX environments. See the current version of the Adabas Review Release Notes for information about supported versions and release levels.

- Adabas Version Requirements
- Natural Version Requirements
- TP Monitor Support

Adabas Version Requirements

There are specific version requirements for Review 4.3.2 in both local and hub mode. See *Review* 4.3 Version Compatibility in the *Review* 4.3.2 *Release Notes* for a detailed matrix of these version requirements.

Natural Version Requirements

Adabas Review version 4.3.2 supports Natural version 3.1 and above.

TP Monitor Support

Adabas Review version 4.3.2 supports the following TP monitors at the indicated levels:

- Com-plete 6.1 or above
- CICS 3.2 or above
- IMS/DC
- TSO; TSS

Notes:

- 1. References in this manual to TSO are also valid for TSS unless otherwise noted.
- 2. Support for z/OS.e is currently restricted to client programs executing in batch, or under TSO or Com-plete.

Using the Adabas Review Installation Tape

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

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

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

Jobs Library Members

Installation Tape Description

The Adabas Review version 4.3.2 installation tape contains the following data sets:

| Data Set | Created Using | DCB= |
|-------------|---------------|------------------------------------|
| REV43s.INPL | IEBGENER | (RECFM=VB,LRECL=4624,BLKSIZE=4628) |
| REV43s.SYSF | IEBGENER | (RECFM=VB,LRECL=9996,BLKSIZE=1000) |
| REV43s.SRCE | IEBCOPY | (RECFM=FB,LRECL=80,BLKSIZE=3120) |
| REV43s.JOBS | IEBCOPY | (RECFM=FB,LRECL=80,BLKSIZE=3120) |
| REV43s.LOAD | IEBCOPY | (RECFM=U,BLKSIZE=6447) |
| REV43s.Z000 | IEBGENER | (RECFM=FB,LRECL=80,BLKSIZE=3120) |

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 | | 14 |
| SYSF | | 1 TRK |
| SOURCE | 10 | 1 |
| JOBS | 10 | 1 |
| LOAD | 10 | 1 |
| Z000 | | 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 | |
|----------|--|--|
| AUT1PARM | Sample startup parameters for Adabas Review | |
| AUT2PARM | Sample startup parameters for Adabas Review | |
| CLEXPRT1 | Macro used in the report user exit RPTEXIT | |
| DTLEXIT | Sample detail report user exit for writing SMF records | |
| LOGUEXIT | Sample Assembler source code for an Adabas Review command logging user exit | |
| REVCOST | Sample Adabas Review parameters used to produce an Adabas cost accounting report | |
| REVFDT | FDT control cards for the Adabas Review repository | |
| RVUCARD | Sample parameters for running a batch job | |
| RVUEX1 | Sample operating environment control parameters for Adabas Review | |
| RVUPARM | Internal use only | |
| SAMPUEX5 | Sample user exit 5 program | |
| SUMEXIT | Sample summary report user exit | |
| UEX5PARM | Adabas user exit 5 macro used for the Adabas Review hub | |
| USRPARM | Sample parameters for user-defined fields | |
| ZAPOPT | Contains optional zaps for installing Review 4.3 | |

Jobs Library Members

Jobs library members for Adabas Review are as follows:

| Member | Description | | |
|---|---|--|--|
| BATCHRPT | Sample job to create batch reports | | |
| EXPAND1 | D1 Sample job to upgrade a version 4.1 repository to a version 4.2 repository | | |
| EXPAND2 | XPAND2 Sample job to upgrade a version 4.2 repository to a version 4.3 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 | | |
|----------|--|--|--|
| LINKLCC | 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 on Natural usage in CICS | | |
| LINKLCO | 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 on Natural usage in Com-plete | | |
| LINKLNK | For TSO installations; sample job used to link the Adabas Review link routine exit with the TSO/batch Adabas link routine; used when reporting on Natural usage in TSO or batch jobs | | |
| MAKEALT | Sample JCL to create the RVUALT data set | | |
| REVCLCOP | P 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.

Installation: Phase 1

| Install Adabas Review under Natural | |
|--------------------------------------|----|
| Install the Adabas Review Repository | |
| Install Adabas Review under Adabas | |
| Install the Adabas Review Hub | |
| Optional Installation Procedures | 19 |

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, as follows:

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.

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. Allocate and unload the installation files to disk
- Step 2. INPL Adabas Review
- Step 3. Create a Natural profile using the SYSPARM facility
- Step 4. Define Adabas Review to Natural Security

Step 1. Allocate and unload the installation files to disk

Use the sample job provided in this step to allocate and copy the Adabas Review installation files to disk. All data set sizes are based on 3390 device types. Be sure to make the following replacements in the JCL:

| Replace | With | | |
|---------|--|--|--|
| vrs | he current version, revision, and system maintenance (SM) level of Adabas Review | | |
| n | the data set sequence number | | |
| vvvvvv | the tape volume serial number | | |
| ????? | the disk volume serial number | | |

| //RESTORE | JOB | (accounting),CLASS=A,MSGCLASS=X |
|------------|------|--|
| //IEBGENER | EXEC | PGM=IEBGENER |
| //SYSPRINT | DD | SYSOUT=X |
| //SYSIN | DD | DUMMY,BLKSIZE=80 |
| //SYSUT1 | DD | DSN=REVvrs.INPL,DISP=(OLD,PASS),UNIT=TAPE, |
| // | LABE | L=(n,SL),VOL=(,RETAIN,SER=vvvvvv) |
| //SYSUT2 | DD I | DISP=(,CATLG,DELETE),DSN=REVvrs.INPL, |
| // | VOL= | <pre>SER=?????,UNIT=SYSDA,SPACE=(CYL,(10,1))</pre> |

//* //IEBGENER EXEC PGM=IEBGENER //SYSPRINT DD SYSOUT=X //SYSIN DD DUMMY, BLKSIZE=80 //SYSUT1 DSN=REVvrs.SYSF,DISP=(OLD,PASS),UNIT=TAPE, DD 11 LABEL=(n,SL),VOL=(,RETAIN,SER=vvvvv) DD DISP=(,CATLG,DELETE),DSN=REVvrs.SYSF, //SYSUT2 11 VOL=SER=?????.UNIT=SYSDA.SPACE=(CYL.(1.1)) //* //IEBCOPY EXEC PGM=IEBCOPY //SYSPRINT DD SYSOUT=X //IN DD DSN=REVvrs.SRCE,DISP=(OLD,PASS),UNIT=TAPE, 11 LABEL=(n,SL),VOL=(,RETAIN,SER=vvvvv) //OUT DD DISP=(,CATLG,DELETE),DSN=REVvrs.SRCE, 11 VOL=SER=?????,UNIT=SYSDA,SPACE=(CYL,(1,1,10)) DD //SYSIN * COPY I=IN.0=OUT //* //IEBCOPY EXEC PGM=IEBCOPY //SYSPRINT DD SYSOUT=X //TN DD DSN=REVvrs.JOBS,DISP=(OLD,PASS),UNIT=TAPE, 11 LABEL=(n,SL),VOL=(,RETAIN,SER=vvvvv) //OUT DISP=(,CATLG,DELETE),DSN=REVvrs.SRCE, DD 11 VOL=SER=?????,UNIT=SYSDA,SPACE=(CYL,(1,1,10)) //SYSIN DD * COPY I=IN,O=OUT //* //IEBCOPY EXEC PGM=IEBCOPY //SYSPRINT DD SYSOUT=X DSN=REVvrs.LOAD,DISP=(OLD,PASS),UNIT=TAPE, //IN DD 11 LABEL=(n,SL),VOL=(,RETAIN,SER=vvvvv) //OUT DISP=(,CATLG,DELETE),DSN=REVvrs.LOAD, DD VOL=SER=?????.UNIT=SYSDA.SPACE=(CYL.(3.1.12)) 11 //SYSIN DD * COPY I=IN, O=OUT //* //IEBGENER EXEC PGM=IEBGENER //SYSPRINT DD SYSOUT=X //SYSIN DD DUMMY, BLKSIZE=80 //SYSUT1 DD DSN=REVvrs.Z000,DISP=(OLD,PASS),UNIT=TAPE, 11 LABEL=(n,SL),VOL=(,RETAIN,SER=vvvvvv) //SYSUT2 DD DISP=(,CATLG,DELETE),DSN=REVvrs.Z000, 11 VOL=SER=?????,UNIT=SYSDA,SPACE=(CYL,(1,1,10)) //* //IEBGENER EXEC PGM=IEBGENER //SYSPRINT DD SYSOUT=X DUMMY,DCB=BLKSIZE=80 //SYSIN DD //SYSUT1 DD * //SYSUT2 DD DISP=(,CATLG,DELETE),DSN=REVvrs.ALTHIST.

// VOL=SER=????,UNIT=SYSDA,SPACE=(CYL,(2,2)), // DSORG=PS,RECFM=VB,LRECL=9996,BLKSIZE=10000

Step 2. 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 3. 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=40 | 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. |

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

NTFILE ID=241,DBID=dbid,FNR=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 4. 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 - V431 - CLOG
REVIEW - FNAT
REVIEW - ADABAS - V431 - 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: |
|--------|
| 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 4.1 repository to a version 4.2 repository, run the EX-PAND1 job from the JOBS library.
- 3. To convert an Adabas Review version 4.2 repository to a version 4.3 repository, run the EX-PAND2 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 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.

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).

Optionally, you can also set up the Adabas Review repository for ISN reuse:

ISNREUSE=YES

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 Install

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.

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(AUT1PARM)
//RVUAUT2 DD DISP=SHR,DSN=REVvrs.SRCE(AUT2PARM)
//RVUCARD DD DISP=SHR,DSN=REVvrs.SRCE(RVUCARD)
//RVUFLD DD DISP=SHR,DSN=REVvrs.SRCE(USRPARM)
//RVUPARM DD DUMMY
//RVUPARM DD DUMMY
//RVUPRT00 DD SYSOUT=X,LRECL=133
//RVUPRT02 DD SYSOUT=X,LRECL=133
//RVUPRT03 DD SYSOUT=X,LRECL=133
//SYSUDUMP DD SYSOUT=X
```

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

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

Hub Mode: Client Interface Install

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



Important: If you are currently running Review DB 3.4 or below, you must completely uninstall it from the Adabas startup JCL.

To install the Adabas Review client interface for a database:

1 Add the following to the front of the //STEPLIB concatenation:

//STEPLIB DD DISP=SHR,DSN=REVvrs.LOAD, // DD (existing STEPLIB libraries)

- 2 Apply the required ZAPs.
- 3 Ensure that an unmodified Adabas version 7 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.

4 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 2. 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

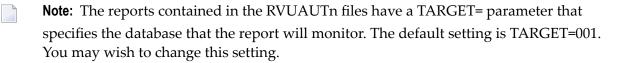
- Correct any library names or file names.
- Modify the ADARUN parameter REVIEW=hubid to reflect the target ID you plan to use for the Adabas Review hub.
- Modify the ADARUN parameter SVC to reflect the correct SVC number. This SVC must be the same as that used by the sending Adabas nuclei.

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.



Step 2. Start the HUBJCL job

Note: If the STEPLIB is not APF-authorized, message REVH16 is issued and Trans-port is disabled.

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 to both local and hub mode installations.

To report on Natural activity from a batch Natural job (Review 4.3 with Adabas 7.4.2 and above link routine):

- Link the ADALNK for TSO/batch created in step 2 with the Adabas Review 4.3 link routine exit. Jobs library member LINKLNK contains the JCL necessary to do this.
 - Notes:
 - 1. If you elect to use the link routine ADALNKX, link the batch Review link routine exit to ADALNKR.
 - 2. Note: (Hub mode only) Software AG recommends that the modified ADALNK not be placed in the Adabas load library. Adabas uses ADALNK to send its information to the Adabas Review hub. The link routine exits cause unnecessary overhead for this process.

-

To report on Natural activity from a batch Natural job (Review 4.3 with Adabas 7.4.1 and below link routine):

1 Modify the Adabas link routine for TSO/batch (ADALNK) to specify:

LRVINFO EQU 256

- **Note:** If you elect to use the link routine ADALNKX rather than ADALNK, make this change to ADALNKR.
- 2 Assemble and link ADALNK.
 - **Note:** If you updated ADALNKR in the previous step rather than ADALNK, assemble and link ADALNKR.
- 3 Link the ADALNK for TSO/batch created in step 2 with the Adabas Review 4.3 link routine exit. Jobs library member LINKLNK contains the JCL necessary to do this.



- 1. If you elect to use the link routine ADALNKX, link the batch Review link routine exit to ADALNKR.
- 2. Note: (Hub mode only) Software AG recommends that the modified ADALNK not be placed in the Adabas load library. Adabas uses ADALNK to send its information to the Adabas Review hub. The link routine exits cause unnecessary overhead for this process.



Installation: Phase 2

| Install Adabas Review under Com-plete | 22 |
|---------------------------------------|----|
| Install Adabas Review under CICS | 23 |
| Install Adabas Review under TSO | 24 |
| Install Adabas Review under IMS/DC | 25 |

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
- IMS/DC

This chapter covers the following topics:

Install Adabas Review under Com-plete

Note: Adabas Review 4.3.2 must be executed with the Adabas 7.1.2 or above version of ADALCO.

To install the Com-plete components of Adabas Review (Review 4.3.2 with Adabas 7.4.2 and above link routine):

- 1 Use the JCL in jobs member LINKLCO to link RDBLXCOM to the Adabas link routine ADALCO.
- 2 Restart Adabas and Com-plete.
- 3 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.

To install the Com-plete components of Adabas Review (Review 4.3.2 with Adabas 7.4.1 and below link routine):

1 Modify the Adabas link routine for Com-plete ADALCO to specify:

LRVINFO EQU 256

Then assemble and link ADALCO.

- 2 Use the JCL in jobs member LINKLCO to link RDBLXCOM to the Adabas link routine ADALCO.
- 3 Restart Adabas and Com-plete
- 4 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 CICS

To install the CICS components of Adabas Review (all versions):

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, assemble, and link the Adabas link routine for CICS

Modify the ADAGSET parameter member to specify:

&LRINFO=256, &LUSAVE=72

6

Then assemble and link the Adabas command-level link routine.

- 3 Use the JCL in jobs member LINKLCC to link the Adabas Review 4.3 link routine exit RD-BLXCIC to the Adabas command-level link routine.
- 4 Restart Adabas and CICS.
- 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.

Note: Adabas Review 4.3.2 requires the Adabas version 7.4 command-level link routine and CICS 3.2 and above.

4

Install Adabas Review under TSO

To install the TSO components of Adabas Review (Review 4.3.2 with Adabas 7.4.2 and above link routine):

1 Use the JCL in jobs member LINKLNK to link the Adabas Review 4.3 link routine exit RD-BLXMVS to the ADALNK created in step 1.

- 2 Restart the TSO session and Adabas.
- 3 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.

To install the TSO components of Adabas Review (Review 4.3.2 with Adabas 7.4.1 and below link routine):

1 Modify the Adabas link routine for TSO/batch (ADALNK) to specify:

LRVINFO EQU 256

Then assemble and link ADALNK.



Note: If you elect to use the link routine ADALNKX rather than ADALNK, make this change to ADALNKR and then assemble and link ADALNKR.

2 Use the JCL in jobs member LINKLNK to link the Adabas Review 4.3 link routine exit RD-BLXMVS to the ADALNK created in step 1.

Note: If you elect to use the link routine ADALNKX, link the batch Review routine RDBLXMVS to ADALNKR.

- 3 Restart the TSO session and Adabas.
- 4 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.

Note: If you elect to use the link routine ADALNKX, link the batch Review routine RDBLXMVS to ADALNKR.

Install Adabas Review under IMS/DC

To install the IMS/DC components of Adabas Review (Review 4.3.2 with Adabas 7.4.2 and above link routine):

- 1 Modify and link the Natural IMS/DC interface module. Include the following in the link of the Natural IMS interface module:
 - ADALNI and ADALNK, the modules created in step 1; and
 - **Note:** Do not link any Adabas Review link routine exits to ADALNI and ADALNK prior to this step.
 - RDBLXIMS, the Adabas Review IMS/DC link routine exit.
 - **Note:** The ADALNK module is to be used for Natural IMS BMP processing and must not be linked with the Adabas Review batch/TSO link routine exit RDBLXMVS before it is included in the Natural IMS interface.
- 2 Restart the IMS/DC MPP region(s) in which Natural executes.
- 3 Restart Adabas.
- 4 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.

To install the IMS/DC components of Adabas Review (Review 4.3.2 with Adabas 7.4.1 and below link routine):

1 Modify the Adabas link routines for IMS/DC (ADALNI and ADALNK) to specify:

LRVINFO EQU 256

Then assemble and link them.

- 2 Modify and link the Natural IMS/DC interface module. Include the following in the link of the Natural IMS interface module:
 - ADALNI and ADALNK, the modules created in step 1; and
 - **Note:** Do not link any Adabas Review link routine exits to ADALNI and ADALNK prior to this step.
 - RDBLXIMS, the Adabas Review IMS/DC link routine exit.

- **Note:** The ADALNK module is to be used for Natural IMS BMP processing and must not be linked with the Adabas Review batch/TSO link routine exit RDBLXMVS before it is included in the Natural IMS interface.
- 3 Restart the IMS/DC MPP region(s) in which Natural executes.
- 4 Restart Adabas.
- 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.

Starting Adabas Review

| Starting Adabas Review for the First Time | 28 |
|---|----|
| Accessing Adabas Review | 32 |
| Verifying the Installation | 33 |

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 4.3, 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 Review reports.

This section covers the following topics:

- Initializing the Review User Profile System
- Initializing the Adabas Review Data File

Initializing the Review User Profile System

To initialize the Review user profile system:

- 1 Access Natural as you normally do.
- 2 At the NEXT prompt, log on to the library SYSREVDB.



4

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.

| 14:45:13 | ADABAS - REVIEW Main Menu | | YYYY-MM-DD LOCL=00222 |
|----------|------------------------------|------------------------------|--------------------------|
| | Code | Description | |
| | | | |
| | AA | Available ADABAS Nuclei | |
| | AO | ADABAS Online System | |
| | EB | Edit Buffer Pool Report | |
| | ER | Edit Report Definition | |
| | ET | Edit Target Definition | |
| | EL | Edit Pulse Report | |
| | ΕX | Edit Cluster Services Report | |
| | LH | List History Reports | |
| | LR | List Report Definitions | |
| | LS | List Started Reports | |
| | LT | List Target Definitions | |
| | SV | SVCs for AA | |
| | UP | User Profiles | |
| | | | |
| | | | |
| Command: | | | |
| | | | |
| | 2PF3PF4 Fin | PF5PF6PF7PF8PF9PF1(|)PF11PF12 Fin |

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

Initializing the Adabas Review Data File

Note: If you are using a repository from version 4.1 or 4.2, 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 Initialization Process window:

```
*****
09:34:30
                           REVIEW ****
                                                        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.

**** R E V I E W ***** 14:36:22 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

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

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, Review creates the default target definition and displays a message.

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

| 14:37:46 | **** REVII | EW **** | YYYY - MM - DD |
|----------------|------------------------|-------------------------|----------------|
| | Initialization | n Process | HUB=12345 |
| | | | |
| REVOO104 - NOW | CREATING DEFAULT TARGE | T DEFINITION | |
| REV00054 - NOW | CREATING SAMPLE REPORT | SUMMARY REPORT BY FILE | |
| REV00054 - NOW | CREATING SAMPLE REPORT | EXCEPTIONAL RESPONSE CO | DES |
| 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 IO | S BY HOUR |
| REV00054 - NOW | CREATING SAMPLE REPORT | RATE OF COMMANDS AND IO | S BY DATE |
| REV00054 - NOW | CREATING SAMPLE REPORT | NATURAL SUMMARY | |
| REV00054 - NOW | CREATING SAMPLE REPORT | WHO IS USING NATURAL | |
| REVOOO54 - 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

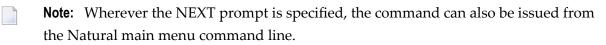
4 Press ENTER as requested; continue until all Adabas Review supplied reports are initialized.

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

Accessing Adabas Review

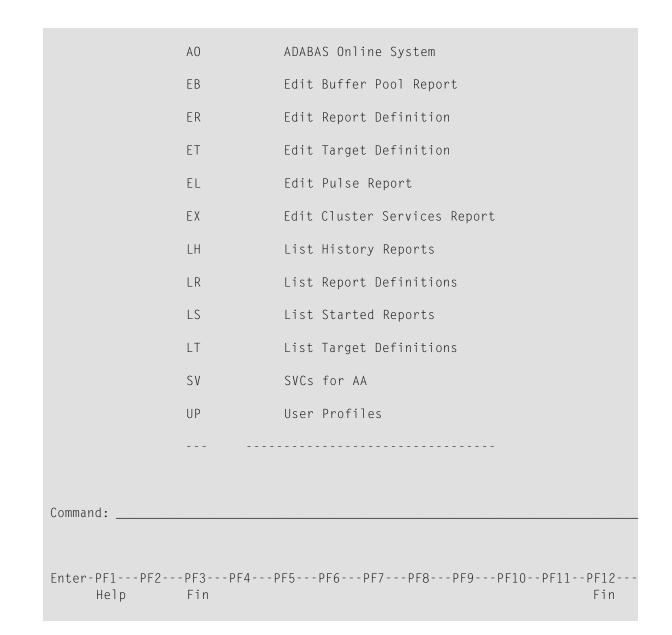
To access Adabas Review:

- 1 Access Natural as you normally do.
- 2 At the NEXT prompt, log on to the library SYSREVDB (type LOGON SYSREVDB).



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

| 14:45:13 | A D A | BAS - REVIEW Main Menu | YYYY-MM-DD LOCL=00222 |
|----------|-------|---------------------------|--------------------------|
| | Code | Description | |
| | | | |
| | AA | Available ADABAS Nuclei | |



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.

6 Operations

| Processing Abends | 40 |
|--|----|
| Adding Adabas Startup Statements at Installation | |
| Files Used by Adabas Review | |
| Editing the RVUEX1 Parameter File | 46 |
| Command Logging Considerations | 47 |
| Modifying Configuration Parameters | 50 |
| User Exit 5 Adabas Review Hub Event Handler | 52 |
| Review Natural User Exits | 54 |

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 OS/390 and z/OS, the following are example sequences of console messages sent during abend processing:

```
REVESTAE - REVIEW ESTAE EXIT DRIVEN

REVESTAE - REVIEW NOW DISABLED

REVESTAE - ABEND 000C1000 PSW 078D2000 80129E98

REVESTAE - R0 00000002 - R1 0D652DD0 - R2 000FD240 - R3 000FBCC0

REVESTAE - R4 00129C48 - R5 0D50AFA8 - R6 0D6E8000 - R7 001331F8

REVESTAE - R8 0D50B0E8 - R9 800E93E0 - R10 00042000 - R11 0D5007E0

REVESTAE - R12 80128C48 - R13 00128D68 - R14 001294BA - R15 8000DD10

REVESTAE - 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 OS/390 and 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=REV vrs. ALTHIST
//RVUAUT1 DD DISP=SHR,DSN=REVvrs.SRCE(AUT1PARM)
//RVUAUT2 DD DISP=SHR,DSN=REVvrs.SRCE(AUT2PARM)
//RVUCARD DD DISP=SHR,DSN=REVvrs.SRCE(RVUCARD)
//RVUFLD DD DISP=SHR,DSN=REVvrs.SRCE(USRPARM)
//RVUPARM DD DUMMY
//RVUPRTOO DD SYSOUT=X,LRECL=133,RECFM=FBA
//RVUPRT01 DD SYSOUT=X,LRECL=133,RECFM=FBA
//RVUPRTO2 DD SYSOUT=X,LRECL=133,RECFM=FBA
//RVUPRTO3 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
- RVUALT History File
- RVUATU1 and RVUAUT2 Report Definition Data Sets
- RVUCARD Data Set for the GENCARD Command
- RVUEX1 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 the 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.

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.

RVUATU1 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 OS/390 and 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.

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.

RVUEX1 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 RVUEX1 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:

- RVUEX1 User-Specified Parameter
- RVUEX1 Timeout Parameters

RVUEX1 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.

RVUEX1 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.

- Command Logging Information Flow
- Setting Up Command Logging

Using the Command Logging User Exit

Command Logging Information Flow

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

Command log information is passed from Adabas to Adabas Review. Under some conditions, information is returned to Adabas. Information flows between Adabas Review and Adabas as follows:

- 1. Adabas passes command logs to Adabas Review. All Adabas command logging information is passed to Adabas Review.
- 2. The user determines what information is reported.

Adabas Review users are given the option to suppress any unnecessary information on a reportby-report basis. This option is available from the Edit Report (ER) function. The user selects from parameters that mirror the ADARUN parameters.

Setting Up Command Logging

The user has 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 (in local mode, Adabas) startup JCL.

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 Adabas Review hub (in local mode, Adabas) 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:

CMLOGO1 and CMLOGO2

The five-character name is referenced by the report in the command logging report option FILE. The total number of data sets is referenced by the report in the command logging report option NUM OF LOGS.

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 and switches to the next sequential file. If all files have been filled, Adabas Review switches back to the oldest file and begins again.

If a command logging user exit is not specified, Adabas Review simply closes a filled command log file and opens the next file. When all files are filled, Adabas Review writes over the file containing the oldest data.

- LOGUEXIT
- REVCLCOP
- End-of-File Marker Position

LOGUEXIT

A user exit is provided so that the data contained in the command log file may be copied to a new file before the command log file is overwritten with new command log data. This user exit is called each time a command log file is closed or opened.

The source library member LOGUEXIT contains sample code for the user exit that processes command logs. You may modify this exit so that it conforms to your site requirements, and users may include the exit name on the Report Options screen of their report definition.

REVCLCOP

When a command log file is closed, the user exit starts the command log copy job. The jobs member REVCLCOP contains a sample command log copy job.

This job copies the contents of a filled command log file to another device and appends the new data to existing data. This job also reinitializes the end-of-file marker in the command log file.

End-of-File Marker Position

When a command log file is opened, the user exit checks the position of the end-of-file marker to determine if there is any data in the command log file.

- If the position indicates that there is no data in the file, Adabas Review writes command log data to the file.
- If the position indicates that there is data in the file, Adabas Review sends a message to the operator asking whether Review should wait until the copying of the command log is completed, or begin writing to the command log file and overwrite the existing data.

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 | NATIchar | 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 | Ι |

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 <i>nnnn</i> | 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 OS/390 or 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.

User Exit 5 -- Adabas Review Hub Event Handler

User exit 5 is called by the Adabas nucleus when an event occurs with the Adabas Review hub. An event is defined as:

- a connection made with the Adabas Review hub during Adabas session open;
- a connection broken with the Adabas Review hub during Adabas session close; or
- a non-zero return code received from the send operation for a command log record.

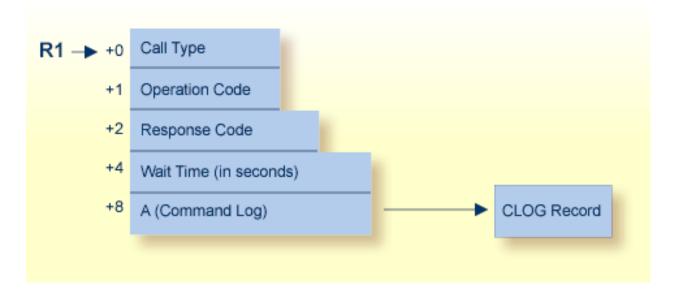
The exit is invoked with AMODE=31 and should return control in the same state.

The exit is required to process logging errors. It determines how the failure is handled. The record that was not logged and the response code received from the Adabas Review hub logging request are provided to assist in making the determination.

- Input Parameters
- Output Parameters

Input Parameters

On entry, the register 1 points to the following parameter list:



| Parm | Usage |
|-------|--|
| 0(R1) | Exit call indication. The value of this byte can be: |
| | "O" connection with Adabas Review hub opened; |
| | "C" connection with Adabas Review hub closed; or |
| | "L" sending logging error to Adabas Review hub. |
| 1(R1) | Action to handle a logging error (ignored for open and close). The exit must provide one of the following values for this field in the parameter list for a logging error: |
| | "W" wait for a specified time and then retry; |
| | "R" retry logging operation immediately; or |
| | "I" ignore the logging failure and continue without consequence. |
| 2(R1) | Response code for logging errors. This response code is the same as the Adabas response code in the Adabas Messages and Codes documentation. |
| | Fullword where the exit must provide a wait time (in seconds) for the logging failures that are to be retried after waiting. |
| 8(R1) | Address of the command log record that the Adabas nucleus was attempting to send to the Adabas Review hub. |

Other Register Values at Entry

| Value | Description |
|-------|--|
| R13 | Save area of calling Adabas nucleus routine. |
| R14 | Return address in Adabas nucleus. |
| R15 | Entry point address for exit. |

Output Parameters

For logging errors, the exit is required to set a value in the *operation* field. If the wait value (W) is chosen, the exit is also required to provide a non-zero time value.

Register 15 should be set to zero. All other registers should be returned intact.

Review Natural User Exits

Review has two Natural user exits. These exits are located in the Review system library in Natural, and may be modified by using the Natural editor. They are applicable to both the Adabas Review and Review DC systems.

P-UEXIT1

P-UEXIT2

P-UEXIT1

| Use: | You may place coding in this program to allow for site-specific needs. | |
|------------|--|--|
| Invoked: | This program is invoked when the online portion of Review is entered. | |
| Example 1: | Setting colors on (SET CONTROL 'T3279') | |
| Example 2: | Turning the PC mode on or off. | |
| Remark: | This program must <i>not</i> alter the Natural stack, and it must end with a STOP command. | |

P-UEXIT2

| Use: | You may place coding in this program to alter the processing that occurs when terminating Review. |
|------------|---|
| Invoked: | This program is invoked when the online portion of Review is terminated. |
| Example 1: | Returning to Natural rather than terminating your session. |
| Example 2: | Logging onto another Natural application. |
| Remark: | Returning to a previous Natural application (using SETUP/RETURN). |

ADARUN Parameters

| ADARUN Functions | 56 |
|-------------------------|----|
| ADARUN Parameter Syntax | 56 |
| ADARUN Parameters | 57 |

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.

ADARUN Functions

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 OS/390 or z/OS. For more specific job information, refer to the appropriate section in this manual.

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 *paramet* - *er*=*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.

ADARUN Parameters

- PROGRAM: Program to Be Executed
- REVIEW: Adabas Review Control
- CT: Command Timeout Limit
- FORCE: Allow Database ID Table Entry Overwrite
- LOCAL: Local Nucleus
- NAB: Number of Attached Buffers
- NC: Number of Command Queue Elements
- SVC: Supervisory Call Number

PROGRAM: Program to Be Executed

| Parameter | Use | Values | Default |
|-----------|-------------------------------------|-----------------|---------|
| PROGRAM | Specify the program to be executed. | ADANUC ADAREV | USER |

This parameter specifies the program to execute: the Adabas nucleus (ADANUC) for the interface installation or Adabas Review (ADAREV) for the hub installation.

For the interface (client) installation, specify PROGRAM=ADANUC to start the Adabas nucleus that will log to Adabas Review hub 27:

```
ADARUN PROGRAM=ADANUC, REVIEW=27
```

See the Adabas documentation for more information about executing an Adabas nucleus.

For the hub (server) installation, specify PROGRAM=ADAREV to start the Adabas Review hub 27:

ADARUN PROGRAM=ADAREV, REVIEW=27

1

REVIEW: Adabas Review Control

| Parameter | Use | Values | Default |
|-----------|--|-------------------|---------|
| REVIEW | Enable Adabas Review in local or hub mode specifying the hub ID, | NO LOCAL dbid | NO |
| | if applicable. | | |

Note: REVIEW replaces the ADARUN parameter REVIEWHUBID introduced in Adabas version 6; however, REVIEWHUBID remains a synonym for REVIEW.

REVIEW controls the use of the Adabas Review product:

| Value | Meaning |
|-------|---|
| NO | The default setting. Adabas Review is not started. |
| LOCAL | Adabas Review is started in local mode running in the Adabas address space as an extension of ADALOG. |
| | Note: Adabas Review no longer runs as a user exit 4. |
| dbid | Adabas Review is started in hub mode. The physical database ID that you specify for the hub identifies either: |
| | 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). |
| | |

Note: Adabas Review version 4.3 supports two-byte DBIDs for databases being monitored and for the hub ID itself.

Example

For the Adabas Review hub (server) installation, start hub 202.

ADARUN PROGRAM=ADAREV, REVIEW=202

For the Adabas Review (client) installation, start the Adabas nucleus that will log to Adabas Review hub 202.

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

CT: Command Timeout Limit

When you are running Adabas Review in hub mode, Software AG recommends that you set the ADARUN CT parameter as low as possible.

| Parameter | Use | Minimum | Maximum | Default |
|-----------|--|---------|----------|---------|
| СТ | Set the maximum time for interregion communication of results from | 1 | 16777215 | 60 |
| | Adabas to user. | | | |

The maximum number of seconds (more precisely, units of 1.048576 seconds) that can elapse from the time an Adabas 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 that is swapped-out or cannot be dispatched;
- User cancelled;
- Low priority of user in high activity system.

If the CT limit is exceeded:

- a BT command will be executed (if applicable and necessary);
- the command queue element and attached buffer will be released;
- a message ADAM93 is printed; and
- if the user has not terminated, response code 254 is returned to the user program.
 - **Note:** This parameter should not be confused with the non-activity (TNAA, TNAE, TNAX) and transaction time limit (TT) parameters, which are based on user activity.

Example

Permit about 5 seconds to obtain a result through interregion communication.

ADARUN PROG=ADAREV,CT=5

FORCE: Allow Database ID Table Entry Overwrite

| Parameter | Use | Values | Default |
|-----------|--|----------|---------|
| FORCE | Specify whether an Adabas Review hub can overwrite an existing ID table entry. | YES NO | NO |

A hub is not allowed to start if an ID table entry already exists for it. When an Adabas Review hub starts up, ADARUN scans the ID table to ensure that no entry exists.

The ID table entry is derived from the Review hub ID and the job name. Normally, the ID table entry is deleted when the hub terminates.

The FORCE parameter allows the hub to overwrite the existing ID table entry and start. 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 hub.

| Value | Meaning |
|-------|---|
| YES | The hub that is starting can overwrite an existing ID table entry. |
| NO | The default setting. If the ID table contains an entry for the hub that is starting, the hub is not allowed |
| | to start. |

Overwriting the existing entry by specifying FORCE=YES:

- prevents further communication to the overwritten entry;
- causes loss of cross-memory environment resources, which cannot be restored until the next initial program load (IPL).
- **Caution:** Do not use the FORCE parameter unless absolutely necessary. Ensure that no hub is active for the ID table entry being overwritten.

Example

If the ID table contains an active entry for Review hub 27, overwrite the entry.

ADARUN PROG=ADAREV, FORCE=YES, REVIEW=27

LOCAL: Local Nucleus

| Parameter | Use | Values | Default |
|-----------|--|----------|---------|
| LOCAL | Defines a nucleus as isolated for local availability only. | YES NO | YES |

If LOCAL=YES (the default), the nucleus is unknown to Entire Net-Work. Such a nucleus can have the same database ID as another database nucleus on another network node.

In hub mode, the hub database can be defined with LOCAL=YES, making it possible to use the same hub ID for other hub databases in your system.

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

Example

The Adabas Review hub nucleus is isolated and can not be addressed by other Entire Net-Work nodes.

ADARUN PROGRAM=ADAREV, REVIEW=27, LOCAL=YES

NAB: Number of Attached Buffers

| Parameter | Use | Minimum | Maximum | Default |
|-----------|--|---------|---------|---------|
| NAB | Specify the number of attached buffers to be used. | 0 | 500,000 | 16 |

An attached buffer is an internal buffer used for interregion communication. An attached buffer is required in all Adabas Review hub environments.

The Adabas Review hub 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 Adabas Review hub can use its high-performance Trans-Port protocol to receive command logs from version 7.1.2 or later Adabas nuclei under the same OS/390 image and using the same SVC as the hub. Trans-Port will obtain additional buffers above the 16-MB line and expand the buffer pool when needed, up to a limit of 80% of available storage. Use the REGION parameter on the hub's JOB or EXEC JCL statement to control the amount of storage available and the maximum size of the buffer pool.

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

Example

Run the Adabas Review hub with 10,000 attached buffers.

ADARUN PROG=ADAREV, NAB=10000

NC: Number of Command Queue Elements

| Parameter | Use | Minimum | Maximum | Default |
|-----------|---|---------|---------|---------|
| NC | Set the maximum number of command queue elements. | 20 | 32767 | 200 |

The number of command queue elements to be established for the Adabas Review hub. This number determines the maximum number of command logs that may be queued and/or be in process at any one time in the Adabas Review hub.

Each command log is assigned a command queue element. The command queue element is released when the log record has been processed.

192 bytes are required for each command queue element.

The Adabas Review hub can use its high-performance Trans-Port protocol to receive command logs from version 7.1.2 or later Adabas nuclei under the same OS/390 image and using the same SVC as the hub. Trans-Port bypasses the command queue and no additional command queue elements need be provided for these clients.

See the Adabas Review user documentation for more information on requirements for hub storage.

Example

Run the Adabas Review hub with a maximum of 5000 command queue elements in the command queue.

ADARUN PROG=ADAREV,NC=5000

SVC: Supervisory Call Number

| Parameter | Use | Values | Default |
|-----------|---|---------|---------|
| SVC | Specify the Adabas SVC number to be used for the Adabas Review hub. | 200-255 | 249 |

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

If the SVC parameter is not specified, the default value is taken from the Adalink being used. The Adalink is delivered with the value 249.

The Adabas SVC is used to perform various Adabas internal functions under OS/390 or z/OS. It is also used to connect the Adabas Review hub to the client Adabas nuclei.

For OS/390 or z/OS, valid SVC values are 200-255.

Example

Execute an Adabas Review hub under OS/390 or z/OS using SVC 202 for the Adabas SVC.

ADARUN PROG=ADAREV, SVC=202

Operator Commands (Hub Mode Only)

| | Entering Operator Commands | 66 |
|-----|----------------------------|----|
| • (| Operator Command Overview | 66 |

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 OS/390 or 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 hubid001 CLIENT(S)LAST-ACT RPT BUF PRTS WBUF LOG-RECORDSREVH13 hubid9603:22:48 YN00300010,323

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 000000013 NEXT EXPECTED SEQUENCE NUMBER AREV07 hubid 000000011 ADASMP ARVU D (C1D9E5E400C40000) PC 2800 AREV07 hubid 000000012 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



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

A

attached buffer, parameter to set hold time limit, 59

С

CLOSE-DBID parameter, CONFIGDB file, 51 commands EDIT CONFIG, 50 EDIT CONFIGDB, 50 INSTALL, 28, 30 CONFIGDB file modifying, 50 CURSOR-POSITION parameter, CONFIGDB file, 50

D

DECIMAL-CHAR parameter, CONFIGDB file, 50 Default Target Definition screen, 31

Ε

EDIT CONFIG command, 50 EDIT CONFIGDB command, 50

I

Initialization Process screen, 31 Initialization Process window, 30 INSTALL command, 28, 30 installation non-TP-specific components, local mode, 10 z/OS command-level link routine, 4

L

local mode, defined, 1

Μ

Main Menu, 32 MAXIMUM-MAXK parameter, CONFIGDB file, 51

Ν

NATPARM, parameter settings, 12 Natural NTFILE definition, 12

0

OPEN-DBID parameter, CONFIGDB file, 52

Ρ

PC-FILE parameter, CONFIGDB file, 50

R

Review Data Communication, 4 Review Natural Monitor, 4 REVIEWDB-UEX parameter, CONFIGDB file, 51 RVBX-MESSAGE parameter, CONFIGDB file, 51

S

System Maintenance Aid (SMA), 4

Т

target, default definition window, 31

U

UBAR parameter, CONFIGDB file, 51 UCMD-TIMEOUT parameter RVUEX1 operating environment, 47 UEX5, 52 UIDT-CELLS parameter, RVUEX1 operating environment, 46 UIDT-TIMEOUT parameter RVUEX1 operating environment, 47 User Profile system, 4

Ζ

z/OS MODIFY (F) for operator commands, 66