# About Review Reports

This chapter describes Adabas Review report types and components, and discusses the display programs used for report output:

- Overview

- Interactive and Batch Reports

- Report Commands

- Components of a Report Definition

- Report Display Program

- List Report Functions

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## Overview

This section provides an overview of Adabas Review reporting features.

### What Does Adabas Review Report?

Adabas Review retrieves performance information about Adabas by collecting data in the form of reports.

Reports capture command log information and provide information about both online and batch transactions. Reports collect data about multiple teleprocessing environments and batch programs that are all using the same database.

### What is an Adabas Review Report?

An Adabas Review report has two parts: a definition and a display program.

- A *report definition* is a set of parameters that specify the data to be captured and a set of processing rules that identify the conditions under which the data is to be captured.

- A *report display program* is a Natural program that specifies the appearance of the report output, whether viewed online or downloaded to a personal computer (PC).

### How are Adabas Review Reports created?

The Edit Report (ER) function is used to create Adabas Review report definitions. In addition, Software AG delivers prepared report definitions called *supplied reports* with Adabas Review. Supplied reports may be modified to meet the requirements at a particular site. Detailed information about supplied reports is provided in the *Adabas Review User's Guide*.

# Interactive and Batch Reports

Reports can be run in either interactive or batch mode:

- In *interactive mode*, Adabas passes information to Adabas Review about resource usage for each command processed by the Adabas nucleus. Online reports are started with the START command.

- In *batch mode*, Adabas Review runs as a batch job that processes sequential Adabas or Adabas Review command log datasets. Batch parameter statements are generated for the report and submitted in the job stream.

# Report Commands

Adabas Review provides commands to

- modify report definitions;

- modify display programs;

- control report data collection; and

- direct report output.

# Components of a Report Definition

An Adabas Review report definition comprises database fields to be monitored, processing rules, and option parameters, all either entered on screens or selected from lists:

- **database fields**
  from which a report extracts data are listed in the order in which they are to be displayed.

- **processing rules**
  identify the conditions under which the data is to be captured by describing how field values are to be extracted for the report.

- **report option parameters**
  specify whether Adabas Review will perform physical command logging, and whether data accumulated by the report will be written to a history file. History data may be used when analyzing database performance trends.

## Database Fields

The selection of database fields defines the subject of the Adabas Review report.

A field identifies a type of information to be collected by the report; for example, information about an Adabas command, the Natural program issuing the command, the Adabas nucleus, the teleprocessing monitor, or the operating system being used. The PF11 (Flds) option is used to display a list of all available Adabas Review report fields.

Up to 20 fields may be used in a particular report. However, the number of fields that can be displayed is limited to the total line size (250 bytes) that can be displayed when a report is viewed online.

Fields to be displayed in a report are entered on the Edit Report screen of the Edit Report (ER) function as shown in the following example:

```
 20:35:15                A D A B A S  -  R E V I E W              YYYY-MM-DD
                              Edit Report                         LOCL=00009

      Report Name: _____   DBID to Monitor: _____

      +----------------------------------------------------------------+
      | Field       Order    Sum   Min   Max   Avg   Pct   Rate  Round |
      |----------------------------------------------------------------|
      | _____     ___      _     _     _     _     _     _    _____ |
      | _____     ___      _     _     _     _     _     _    _____ |
      | _____     ___      _     _     _     _     _     _    _____ |
      | _____     ___      _     _     _     _     _     _    _____ |
      | _____     ___      _     _     _     _     _     _    _____ |
      | _____     ___      _     _     _     _     _     _    _____ |
      | _____     ___      _     _     _     _     _     _    _____ |
      | _____     ___      _     _     _     _     _     _    _____ |
      | _____     ___      _     _     _     _     _     _    _____ |
      | _____     ___      _     _     _     _     _     _    _____ |
      +------------------------ Page 1 ----------------------------+



 Command: _____
 Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
       Help  Optns Exit        Save  Start  -     +          Rules Flds  Menu
```

Detailed information about individual fields is provided in the *Adabas Review User's Guide*.

## Report Processing Rules

Report processing rules are used to set conditions on or limit the data collected by the report.

Processing rules are entered on the Report Processing Rules screen of the Edit Report (ER) function as shown in the following example:

```
 20:24:56               A D A B A S  -  R E V I E W           YYYY-MM-DD
                            Report Processing Rules              LOCL=00009

                                  REPORT ONE
 +-----------------------------------------------------------------------+
 |  Field     Op      Value                                      And/Or  |
 |-----------------------------------------------------------------------|
 |  _____   __   _____     ___    |
 |  _____   __   _____     ___    |
 |  _____   __   _____     ___    |
 |  _____   __   _____     ___    |
 |  _____   __   _____     ___    |
 |  _____   __   _____     ___    |
 |  _____   __   _____     ___    |
 |  _____   __   _____     ___    |
 |  _____   __   _____     ___    |
 |  _____   __   _____     ___    |
 |  _____   __   _____     ___    |
 +------------------------------- Page 1 ---------------------------------


 Command: _____
 Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
       Help  Optns Exit        Save  Start  -     +               Flds  Menu
```

An Adabas Review report processing rule is specified by a field, a relational operator (equal to, less than, greater than, not equal to), and a specific value or range of values.

If there are multiple processing rules, the appropriate logical operator (AND or OR) must also be specified.

Fields used in processing rules are not displayed in the report results unless they are listed on the Edit Report screen.

## Report Option Parameters

Values for report option parameters can be entered on the Report Options screen of the Edit Report (ER) function as shown in the following example:

```
 19:30:50                    *****  R E V I E W  *****              YYYY-MM-DD
                             Report Options For:                    LOCL=00222

 +-------- Report ---------------- Logging ---------------- History --------+
 |  Detail/Sum ......... S   Log ................ N   History ............ N |
 |  AutoStart .......... N   File ........... RVLOG   History Int ... _____ |
 |  Break ............. Y   Num of Logs ....... _2   HISTORY DBID ... __223 |
 |  Wrapping .......... N   Log Size ....... 99999   HISTORY FNR .... ___22 |
 |  Print ............. Y   User Exit ... _____   History SVC ...... 237 |
 |  Rstrt/Intrvl Y _____                                                   |
 |  Max Restarts:  999999                               Report Exits        |
 |  Max K ........... __16      Buffers to Log      --------------------     |
 |  ADALimit ...... _____1   ----------------------   Detail Exit.. _____ |
 |  Display By ..   SORTED   CB: Y    FB: Y   SB: Y   Summary Exit: _____ |
 |  Entries ....... 999999   RB: Y    VB: Y   IB: Y   Cmd .... CL Sum .... N |
 |  Limit ....... 99999999   IO: Y   EX1: N  EX2: N                         |
 |  Page/Line... _55 / 133                                                  |
 |                                                                          |
 +--------------------------------------------------------------------------+


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

Adabas Review is delivered with report options defaults:

- You can modify these defaults for all subsequent reports.

- You can modify the default values for a particular report, either new or existing.

Detailed information about using the Report Options screen is provided in the *Adabas Review User documentation*.

### Report User Exits

Adabas Review provides two report user exits: one for detail reports and one for summary reports.

- A *detail report user exit* is driven when a command log record is selected for the report. Only records that pass the processing rules are provided to the user exit. This exit may be used to create SMF records, accounting records, or for any other purpose.

- A *summary report user exit* is driven when a specified Adabas command is selected for the report; and/or a report is summarized. You may control the conditions that trigger the exit.

When creating a report, the user exit is specified on the Report Options screen or in the batch REPORT statement. The actual report user exit must be provided in an executable library accessible to Adabas Review.

# Report Display Program

Once data has been accumulated for a report, the results can be

- saved to a file;

- viewed online;

- downloaded to a personal computer (PC) using Entire Connection; or

- printed when the Adabas nucleus terminates.

Once a report has been defined, the SAVE command is issued and the report definition is written to the Adabas Review repository.

A unique Natural program, the Adabas Review report display program , is generated automatically whenever a report is created or modified using the Edit Report (ER) function. This program determines how the report data will be viewed online or downloaded to a PC. It controls the appearance of the report output for an active database or for historical data.

You may use the Review-generated display program as it is created, or you may modify it for your individual needs.

The display program is executed when the VIEW command is issued to display the report results online.

**Note:**
The output of reports that print at database termination is not controlled by a display program. At database termination, a SYSOUT from Adabas is written by REVIEWB. The format of this output cannot be modified by the Adabas Review user.

# List Report Functions

Adabas Review provides three list functions for reports, which are accessible from the Adabas Review (DB system) menu:

| Code | List . . . | This function lists . . . |
|------|-----------|---------------------------|
| LR | Report | existing Adabas Review reports by name. Reports may be edited, started, and purged using the commands in this function. |
| LH | History Reports | reports that have accumulated history data in the Adabas Review repository. |
| LS | Started Reports | reports that are currently accumulating data. |

The lists displayed by the LH and LS functions are subsets of the list displayed by the LR function.

From the resulting lists, certain commands can be issued against a particular report that allow you to maintain report definitions, manage started reports, and manage the output they produce.

The commands are entered on the selection line preceding the name of the report.