

Processing Save Tape Input

If the SAVETAPE keyword is specified, the report is printed from a save tape.

The save tape

- must have been created using ADASAV version 5.1 or above;
- may have been created online or offline;
- may be a database save, file save, or delta save tape; and
- must be supplied as a DD/SAVE sequential input file.

ADAREP does not scan the complete save tape: normally, it is sufficient to supply only the first cassette/tape reel.

ADAREP reads through the save tape to pick up the general control block (GCB), the block of unreadable blocks (BUB), the mirror table, the mirror BUB, the free space table (FST), and all the file control blocks (FCBs). Once these are in main memory, ADAREP continues as for a normal database report. The file definition tables (FDTs) are read from the save tape as they are needed: they are not buffered in main memory.

Notes:

1. Adabas version 7.2 and above do not support and therefore do not save BUB or mirror information. However, BUB and mirror information on save tapes from versions of Adabas prior to version 7.2 back to version 5.1 is still reported.
2. A save tape created using ADASAV version 5.1 does not contain the mirror table, the mirror BUB, or the FST. At the corresponding location in the report, a message appears indicating that these blocks are not available.

This chapter covers the following topics:

- Supplying Protection Log Input
- Checking Input Tapes
- Concurrent Parameters
- Reports for Delta Save Tapes
- Report Layout

Supplying Protection Log Input

If an online save tape is used, the corresponding protection log may optionally be specified as a DD/PLOG sequential input file:

- If DD/PLOG is supplied, ADAREP scans the protection log for FCB and FST blocks to ensure that it has the most recent versions.
- If DD/PLOG is not supplied, ADAREP prints a warning message and continues. It displays the database status as of the beginning of the online save operation (time of SYN1/SYN4 checkpoint). Any secondary extents allocated during the online save operation are not reflected in the report because they are only visible on the protection log. In addition, the physical layout section may report phantom errors due to inconsistency in the FCB and FST blocks on the save tape. This happens only if a secondary extent was allocated during the short phase when ADASAV was saving the FCB and FST blocks.

If the save tape you are using was created using ADASAV version 5.1, you must specify the parameters PLOGNUM and SYN1/SYN4 to indicate the protection log number and block number of the SYN1 or SYN4 checkpoint. For tapes created using ADASAV version 5.2 or above, this information is supplied on the tape. Specifying PLOGNUM or SYN1/SYN4 for such tapes *overrides* the information on the tape.

When DD/PLOG is supplied, two tape units are needed in parallel: it is not possible to concatenate the save tape and the protection log as for ADASAV RESTONL.

Checking Input Tapes

After opening the DD/SAVE and DD/PLOG input data sets, ADAREP cross-checks to ensure that the input tapes are correct:

- If an invalid save tape is supplied, ADAREP terminates and displays error-128 (invalid save tape supplied).
- If an invalid protection log is supplied, ADAREP displays an appropriate warning message, sets the condition code to 4, and continues.

Concurrent Parameters

CPLIST/ CPEXLIST information and the number of records loaded for a file cannot be printed from the save tape. If the CPLIST/ CPEXLIST parameter is specified or the NOCOUNT parameter is not specified with SAVETAPE, ADAREP prints a warning message, changes these options internally, and continues processing.

If the save tape was created using ADASAV version 5.3.2 or above, the VOLSER number is printed on the report. For save tapes created using earlier versions of ADASAV, asterisks are printed as VOLSER numbers.

Reports for Delta Save Tapes

For delta save tapes, much of the information is either inaccessible or must be reconstructed:

- The delta save status is always "enabled"; the DLOG area usage is only one block (the header) which is displayed as "n%".

- The last full save number, last delta save number, and the date/time of the last delta save are taken from the DSID.
- The estimated number of changed blocks is MAXFILES times 5 plus 30 rounded to the next multiple of 100.
- The DLOG area location is derived from the GCB.
- The date/time of last full save cannot be reconstructed and is always displayed as "unknown".

Report Layout

The purpose of the save tape report is to determine what the save tape contains.

The save tape report is preceded by a short header indicating the kind of save tape supplied, whether it was created online or offline, when it was created, the version of ADASAV used to create it, the database ID on the save tape, and possibly the delta save identifier of the save tape. For online save tapes, the session number of the corresponding protection log and the block number of the SYN1/SYN4 checkpoint (either supplied or derived from the tape) is displayed.

```

A D A R E P      Vv.r   SMs      DBID = nnnnn  STARTED                yyyy-mm-dd   hh:mm:ss

PARAMETERS:
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ADAREP REPORT SAVETAPE

*****
*
*  REPORT FROM          ONLINE DATABASE SAVE          *
*  CREATED AT          yyyy-mm-dd  hh:mm:ss          *
*  BY ADASAV VERSION   V vr                          *
*  DBIB                nnnnn                          *
*  DSID                1 / 0 /   yyyy-mm-dd  hh:mm:ss *
*  PLOG SESSION NR    17                              *
*  SYN1 BLOCK NR      137                              *
*
*****

*****
*
*  DATA BASE REPORT   *
*
*****
                yyyy-mm-dd   hh:mm:ss

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The database ID printed in the first line of the report is taken from the ADARUN DBID parameter. This DBID is *not* cross-checked with the database ID on the save tape. Instead, the save tape DBID is used throughout the report once the save tape is opened and the GCB read.

The physical layout for file save reports is a table of RABN ranges indicating how each RABN in the database is used. Because a file save tape contains only the FCBs of the saved files, gaps exist in the physical layout table and are reported as "unknown" ranges rather than errors.