RESTRUCTUREF: Restructure Single Files

The RESTRUCTUREF function unloads one or more files to a sequential dataset, which can be used as input to the STORE function to load the files into another database. The target database may be located on a physical device type different from the originating database.

```
ADAORD { RESTRUCTUREF | REF }

FILE = file-number

[ASSODEV = { device-type | DBASSODEV-value } ]

[ASSOPFAC = padding-factor ]

[DATADEV = { device-type | DBDATADEV-value } ]

[DATAPFAC = padding-factor ]

[DBASSODEV = { device-type | ADARUN-device } ]

[DBDATADEV = { device-type | ADARUN-device } ]

[INDEXCOMPRESSION = { YES | NO } ]

[ISNSIZE = { 3 | 4 } ]

[PASSWORD = password ]

[SORTSEQ = { descriptor | ISN | physical-sequence } ]

[LPB = { prefetch-buffer-size | ADARUN-lu } ]

[NOUSERABEND]

[TEST]
```

This chapter covers the following topics:

- Essential Parameter
- Optional Parameters
- Examples

Essential Parameter

FILE: File Number

FILE specifies the file to be restructured. A separate ADAORD FILE statement must be provided for each file to be processed, followed by ADAORD statements containing the relevant parameters for that file.

If you specify a file that is either coupled or part of an expanded file, the related files are automatically added to the file list. A message indicating the files added appears in DDPRINT.

Optional Parameters

ASSODEV: Associator Device Type

ASSODEV specifies the device type to be used for the specified file's new ASSO dataset. This parameter is required only when the device type to be used is different from the default device type. The default device type is specified by the DBASSODEV parameter; if DBASSODEV is not

specified, the default is the device type specified by the ADARUN DEVICE parameter. These parameters have no effect on the data written to the DDFILEA/FILEA dataset.

ASSOPFAC: Associator Padding Factor

ADAORD uses ASSOPFAC to calculate the space required to perform the STORE function for the specified file. Valid values are 1-90. The number of AC, NI, and UI blocks is calculated for the device type specified by ASSODEV and the padding factor specified by ASSOPFAC. If ASSOPFAC is not specified, the current padding factor for the file is used. These parameters have no effect on the data written to DDFILEA.

DATADEV: Data Storage Device Type

DATADEV specifies the device type to be used for the specified file's new DATA dataset. This parameter is required only when the device type to be used is different from the default device type. The default device type is specified by the DBDATADEV parameter; if DBDATADEV is not specified, the default is the device type specified by the ADARUN DEVICE parameter. These parameters have no effect on the data written to DDFILEA.

DATAPFAC: Data Storage Padding Factor

ADAORD uses DATAPFAC to calculate the space required to perform the STORE function for the specified file. Valid values are 1-90 (see the ADALOD LOAD DATAPFAC parameter discussion for more information about setting the padding factor). The number of Data Storage blocks is calculated for the device type specified by DATADEV and the padding factor specified by DATAPFAC. If DATAPFAC is not specified, the current padding factor for the file is used. These parameters have no effect on the data written to DDFILEA.

DBASSODEV: Default Associator Device Type

DBASSODEV specifies a default device type for the new ASSO dataset. ADAORD uses the device type specified here to calculate the ASSO space requirements for each restructured file. If DBASSODEV is not specified, the default is the device type specified by the ADARUN DEVICE parameter.

To override the default device type for a file, use the FILE and ASSODEV parameters. The DBASSODEV parameter has no effect on the data written to the DDFILEA/ FILEA data set.

DBDATADEV: Default Data Storage Device Type

DBDATADEV specifies a default device type for the new DATA dataset. ADAORD uses the device type specified here to calculate the DATA space requirements for each restructured file. If DBDATADEV is not specified, the default is the device type specified by the ADARUN DEVICE parameter.

To override the default device type for a file, use the FILE and DATADEV parameters. The DBDATADEV parameter has no effect on the data written to the DDFILEA/ FILEA data set.

INDEXCOMPRESSION: Calculate Index Sizes for File

INDEXCOMPRESSION indicates for its associated file whether the index space calculation performed and displayed by ADAORD is based on a compressed or uncompressed index.

If INDEXCOMPRESSION is not specified

- but a compression value is specified for the database as a whole, the default is the database value.
- and *no* compression value is specified for the database, the default is the current compression form of the file.

ISNSIZE: 3- or 4-Byte ISN

ISNSIZE specifies whether ISNs in the file are to be 3 or 4 bytes long. The default is the value currently used for the file; this value is stored in the file control block (FCB).

Note:

It is not possible to change the ISNSIZE of a physically coupled file using ADAORD.

LPB: Prefetch Buffer Size

LPB specifies the size, in bytes, of the internal prefetch buffer. The maximum size is 32,760 bytes. The default depends on the ADARUN LU parameter. ADAORD may reduce a specified LPB value if the LU value is too small.

NOUSERABEND: Termination without Abend

When an error is encountered while the function is running, the utility prints an error message and terminates with user abend 34 (with a dump) or user abend 35 (without a dump).

If NOUSERABEND is specified, the utility will *not* abend after printing the error message. Instead, the message "utility TERMINATED DUE TO ERROR CONDITION" is displayed and the utility terminates with condition code 20.

PASSWORD: File Password

If the file is password-protected, use this parameter to specify the password.

SORTSEQ: File Processing Sequence

SORTSEQ determines the sequence in which the file is to be processed. If this parameter is omitted, the records are processed in physical sequence.

If a descriptor is specified, the file is processed in the logical sequence of the descriptor values. *Do not* use a null-suppressed descriptor field, a hyperdescriptor, a phonetic descriptor, a multiple-value field, or a descriptor contained in a periodic group.

Note:

Even when the descriptor field is not null suppressed, the record is *not* represented in the inverted list if the descriptor field or a field following it has never been initialized (held a value). Therefore, the record will be dropped when the utility is executed.

If ISN is specified, the file is processed in ascending ISN sequence. For the Adabas checkpoint or security file, only SORTSEQ=ISN is allowed.

TEST: Test Syntax

This parameter tests the operation syntax without actually performing the operation. Only the syntax of the specified parameters can be tested; not that the validity of values and variables.

Examples

Example 1:

ADAORD RESTRUCTUREF FILE=15

The RESTRUCTUREF function is to be executed. File 15 is to be unloaded in physical sequence. No other files are to be unloaded.

Example 2:

ADAORD RESTRUCTUREF FILE=25,SORTSEQ=KL ADAORD FILE=40,SORTSEQ=J3

The RESTRUCTUREF function is to be executed. Files 25 and 40 are to be unloaded. File 25 is to be unloaded in the sequence of descriptor KL. File 40 is to be unloaded in the sequence of descriptor J3. No other files are to be unloaded.