

# REORASSO: Reorder Associator

The REORASSO function reorders the entire Associator. If a file is not explicitly specified, its related Associator information is reordered according to its existing definition. To reorder Associator information for specific files, use the REORFASSO function.

This function requires exclusive EXF control of the database files involved in the operation. In addition, parts of the database are overwritten during ADAORD execution, so we recommend that you back up the database (or file) using the ADASAV utility first, before running ADAORD functions.

If the file specified for this function was originally loaded with ISNREUSE=YES active, this reorder function will reset the first unused ISN value in that file's control block (FCB) to the actual first unused ISN found in the address converter.

This is the syntax of the ADAORD REORASSO function:

```

ADAORD REORASSO [DBINDEXCOMPRESSION = { YES | NO } ]
                  [FILE = file-number ]
                  [ACRABN = starting-rabn ]
                  [AC2RABN = starting-rabn ]
                  [ALLOCATION = { FORCE | NOFORCE } ]
                  [ASSOPFAC = padding-factor ]
                  [ASSOVOLUME = 'Associator-extent-volume' ]
                  [INDEXCOMPRESSION = { YES | NO } ]
                  [ISNSIZE = { 3 | 4 } ]
                  [MAXISN = highest-isn ]
                  [MAXISN2 = highest-isn ]
                  [NIRABN = starting-rabn ]
                  [NIRELEASE]
                  [NISIZE = size ]
                  [UIRABN = starting-rabn ]
                  [UIRELEASE]
                  [UISIZE = size ]
                  [LPB = { prefetch-buffer-size | ADARUN-lu } ]
                  [MAXFILES = maximum-number-files ]
                  [NEWDBID = database-identifier ]
                  [NEWDBNAME = database-name ]
                  [NOUSERABEND]
                  [RAID]
                  [RPLUPDATEONLY = { YES | NO } ]
                  [TEST]

```

## Note:

If the parameter MAXFILES or NEWDBID is specified, an active nucleus will terminate automatically at the end of the REORASSO function.

This chapter covers the following topics:

- Optional Parameters and Subparameters
  - Examples
- 

## Optional Parameters and Subparameters

### **ACRABN: Starting RABN for Address Converter**

The beginning RABN for the file's address converter extent. If this parameter is omitted, ADAORD assigns the starting RABN. The space requested must be available in one extent.

When specifying the starting RABN for Associator extents, the space needed for the FCBs, FDTs, and DSST should also be considered.

### **AC2RABN: Starting RABN for Secondary Address Converter**

The beginning RABN for the file's secondary address converter extent. The secondary address converter is used to map the secondary ISNs of secondary spanned records to the RABNs of the Data Storage blocks where the secondary records are stored.

If this parameter is omitted, ADAORD assigns the starting RABN. The space requested must be available in one extent. If the file contains no secondary address converter extents, this parameter is ignored.

When specifying the starting RABN for Associator extents, the space needed for the FCBs, FDTs, and DSST should also be considered.

### **ALLOCATION: Action to Follow File Extent Allocation Failure**

ALLOCATION specifies the action to be taken if file extent allocations cannot be obtained according to the placement parameters ACRABN, NIRABN, or UIRABN.

By default (that is, ALLOCATION=FORCE), the utility terminates with error if any file extent allocation cannot be met according to RABN placement parameters.

If ALLOCATION=NOFORCE is specified and any allocation with placement parameters fails, the utility retries the allocation without the placement parameter.

### **ASSOPFAC: Associator Padding Factor**

The new Associator block padding factor. The number specified represents the percentage of each Associator block not to be used during the reorder process. A value in the range 1-90 may be specified. The remaining number of bytes after padding must be greater than the largest descriptor value plus 10.

If this parameter is omitted, the current Associator padding factor in effect for the file is used.

### **ASSOVOLUME: Associator Extent Volume**

**Note:**

The value for the ASSOVOLUME parameter must be enclosed in apostrophes.

ASSOVOLUME identifies the volume on which the corresponding file's Associator space (that is, the AC, NI, and UI extents) should be allocated. If the requested number of blocks cannot be found on the specified volume, ADAORD allocates the remaining blocks on other volumes according to its default rules of allocation.

If ACRABN, UIRABN, or NIRABN is specified, ADAORD ignores the ASSOVOLUME value when allocating the corresponding extent type.

If ASSOVOLUME is not specified, the file's Associator space is allocated according to ADAORD's default allocation rules.

### **DBINDEXCOMPRESSION: Compress Database Indexes**

DBINDEXCOMPRESSION indicates whether the indexes of files are rebuilt in compressed or uncompressed form. It applies to all files for which no INDEXCOMPRESSION parameter is specified.

DBINDEXCOMPRESSION can be used to build compressed or uncompressed indexes for all files of the database, making it unnecessary to specify index compression for each file.

### **FILE: File Number**

The file number to which the following parameters apply. Each specified file and its parameters should be on a separate ADAORD statement following the ADAORD REORASSO function statement.

For any file whose number is not specified, current Associator block padding factor and MAXISN value are retained, and all Associator space allocations remain the same.

### **INDEXCOMPRESSION: Compress File Index**

INDEXCOMPRESSION indicates whether the index for the file is rebuilt in compressed or uncompressed form. A compressed index usually requires less index space and improves the efficiency of index operations in the Adabas nucleus.

If INDEXCOMPRESSION is *not* specified

- but the DBINDEXCOMPRESSION parameter is specified for the database as a whole, the default is the database value.
- and DBINDEXCOMPRESSION is also *not* specified, 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**

Specifies the size, in bytes, of the internal prefetch buffer. The maximum value is 32760 bytes. The default depends on the ADARUN LU parameter. ADAORD may reduce a specified LPB value if the LU value is too small.

**MAXFILES: Maximum Number of Files**

MAXFILES specifies the maximum number of files that can be loaded into the database. The minimum value for this parameter is 3. The highest value permitted is 5000 or one less than the ASSOR1 block size, whichever is lower. For example, 2003 is the highest MAXFILES value for a database whose ASSOR1 is stored on a 3380 DASD.

If this parameter is omitted, the current value for MAXFILES is retained.

When MAXFILES is specified, the nucleus terminates after the ADAORD REORASSO function is completed.

**MAXISN: Highest ISN Permitted for the File**

MAXISN specifies the highest ISN that can be allocated for the file. This value must be greater than the current TOPISN value displayed in the ADAREP database report.

ADAORD uses the specified value to calculate the address converter space required. If this parameter is omitted, the current MAXISN value for the file is retained.

**MAXISN2: Highest Secondary ISN Permitted for the File**

MAXISN specifies the desired size of the secondary address converter (AC2) in ISNs. This value must be greater than the current TOP AC2 ISN value displayed in the ADAREP database report. The secondary address converter is used to map the secondary ISNs of secondary spanned records to the RABNs of the Data Storage blocks where the secondary records are stored.

ADAORD uses the specified value to calculate the space required in the secondary address converter for the file. If this parameter is omitted, the current MAXISN2 value for the file is retained. If the file contains no secondary address converter extents, this parameter is ignored.

**NEWDBID: Database Identifier**

NEWDBID is the ID to be assigned to the database. A value in the range 1-65535 may be used. For systems using Online System Security, the value 999 is reserved. If this parameter is omitted, the current database ID is retained.

When NEWDBID is specified, the nucleus terminates after the ADAORD REORASSO function is completed.

**NEWDBNAME: Database Name**

The name to be assigned to the database. The name assigned may be from 1 to 16 characters. If this parameter is omitted, the current database name is retained.

If the database name contains special characters or embedded blanks, the name must be enclosed within apostrophes ('...'), which themselves must be doubled if included in the name; for example, 'JAN''S DB'.

**NIRABN: Starting RABN for Normal Index**

NIRABN specifies the beginning RABN number for the normal index extent. If this parameter is omitted, ADAORD assigns the starting RABN.

**NIRELEASE: Release Unused Normal Index Blocks**

Specifying NIRELEASE releases unused normal index (NI) blocks belonging to the specified file. If NIRELEASE is not specified, ADAORD allocates *at least* the number of NI blocks that were allocated before the file was reordered.

**Note:**

Adabas calculates the file extent size using any changed padding factor or block size values *before* the file is reordered.

**NISIZE: Normal Index Size**

NISIZE is the number of blocks or cylinders to be allocated for the normal index. If the value is blocks, it must be followed by a "B" (for example, "2000B").

If this parameter is omitted, ADAORD computes the file extent size in proportion to any increase or decrease in the ASSOPFAC padding factor.

**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.

**RAID: Action to Follow Determination That File Does Not Exist**

The RAID parameter instructs ADAORD to ignore any FILE parameters that refer to a file that does not exist in the database.

If RAID is not specified (the default), ADAORD terminates with an error message when it encounters a FILE parameter referring to a file that does not exist in the database.

The RAID parameter is provided for use in recovery jobs built by the Adabas Recovery Aid (ADARAI).

**RPLUPDATEONLY: Allow Only Event Replicator Processing Updates**

The RPLUPDATEONLY parameter can be used in the ADAORD REORASSO function to indicate whether this Adabas database file may be updated only by the Event Replicator Server as part of Adabas-to-Adabas replication or by other means as well. This parameter is optional. Valid values are "YES" or "NO". A value of "YES" indicates that the file can only be updated via Event Replicator processing; a value of NO indicates that the file can be updated by any normal means, including Event Replicator processing. There is no default; if no value is specified for the RPLUPDATEONLY parameter in the ADAORD REORASSO function, the value used previously for the file is used.

**TEST: Test Syntax**

This parameter tests the operation syntax without actually performing the operation. Note that the validity of values and variables *cannot* be tested: only the syntax of the specified parameters can be tested.

**UIRABN: Starting RABN for Upper Index**

UIRABN is the beginning RABN number for the file's upper index extent. If this parameter is omitted, ADAORD assigns the starting RABN for each of these extents.

**UIRELEASE: Release Unused Upper Index Blocks**

Specifying UIRELEASE releases unused upper index (UI) blocks belonging to the specified file. If UIRELEASE is not specified, ADAORD allocates *at least* the number of UI blocks that were allocated before the file was reordered.

**Note:**

Adabas calculates the file extent size using any changed padding factor or block size values *before* the file is reordered.

**UI SIZE: Upper Index Size**

UI SIZE is the number of blocks or cylinders to be allocated for the upper index. If the value is blocks, it must be followed by a "B" (for example, "2000B").

If this parameter is omitted, ADAORD computes the file extent size in proportion to any increase or decrease in the ASSOPFAC padding factor.

## Examples

**Example 1:**

```
ADAORD REORASSO
```

The Associator is to be reordered.

**Example 2:**

```
ADAORD REORASSO
ADAORD MAXFILES=200
ADAORD NEWDBID=6 ,NEWDBNAME=DATABASE-6
```

The Associator is to be reordered. A maximum of 200 files are permitted for the database. The database ID and name are to be 6 and DATABASE-6, respectively.

**Example 3:**

```
ADAORD  REORASSO
ADAORD  FILE=1,ACRABN=1000,NIRABN=2200,
ADAORD  FILE=2,MAXISN=500000,
ADAORD  FILE=4,ASSOPFAC=5
```

The Associator is to be reordered. The address converter allocation for file 1 is to begin with RABN 1,000. The normal index for file 1 is to begin with RABN 2,200. The MAXISN for file 2 is to be set to 500,000. The Associator block padding factor for file 4 is to be set to 5 percent. The Associator information for all other database files is reordered according to each file's current definition.