Adabas

DBA Reference Summary

Version 8.5.4

October 2025

ADABAS & NATURAL

This document applies to Adabas Version 8.5.4 and all subsequent releases.

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

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Document ID: ADAMF-AADAMFDBACARD-854-20251029

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Preface

This document summarizes the syntax and use of ADARUN parameters, operator commands, Adabas utilities, and other Adabas information useful to an Adabas DBA.

The following summarizes the topics covered by this documentation:

ADARUN Parameters	Provides the syntax of all ADARUN parameters.
ADARUN Parameter Errors	Describes the possible ADARUN errors that can occur when ADARUN parameters are incorrectly specified.
Console Operator Commands	Provides the syntax of all Adabas console operator commands.
Adabas Utilities	Provides the syntax of all Adabas utilities.
Adabas Device Types and Block Sizes	Lists the device types supported by Adabas in z/OS, z/VSE, and BS2000 operating environments.
Database Space Allocation Rules	Describes the database space allocation rules in place for Adabas.
Adabas Nucleus Response Codes	Describes Adabas nucleus response codes.
Adabas Checkpoints	Describes the Adabas nucleus and utility checkpoints.
Adabas Command Log Layouts	Describes where to find the latest Adabas command log layouts.

1 Conventions

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This document covers the following topics:

- Syntax Conventions
- Adabas Utility Syntax

Syntax Conventions

The following table describes the conventions used in syntax diagrams of Adabas statements, commands, and ADARUN parameters.

Convention	Description	Example
uppercase, bold	Syntax elements appearing in uppercase and bold font are Adabas keywords. When specified, these keywords must be entered exactly as shown.	**ADADBS CHANGE FILE =** *file-number* The syntax elements ADADBS, CHANGE, and FILE are Adabas keywords.
lowercase, italic, normal font	Syntax elements appearing in lowercase and italic font identify items that you must supply.	**ADADBS CHANGE FILE =** *file-number* The syntax element *file-number* identifies and describes the kind of value you must supply. In this instance, you must supply the number of the file affected by the ADADBS CHANGE operation.
mixed case, normal font	Mixed case is used for two purposes: 1. To identify the short form of a keyword. The short form is the part in uppercase; the lowercase parts of the statement, command, or parameter is not necessary. **Note:** If a lowercase part appears in italics, it represents a value you must supply; in this case the syntax would not identify a short form. 2. Some values of parameters are taken from values of other parameters. In these cases, the name of the parameter	1. **DEvice** In the example above, the minimum form of the parameter is DE. However, in the following example, the *nn* identifies a value you must supply. There is no minimum form of the parameter. **UEX***nn* 2. **[SORTDEV = {** *device-type* | ADARUN-device **}]** The syntax element "ADARUN-device" indicates that the device type identified by the ADARUN DEVICE

Convention	Description	Example
	referenced for the value appears in uppercase Syntax elements appearing in mixed case and normal font (not bold or italic) identify items established by other Adabas control statements. This notation is usually used to identify how default values are determined for some parameters in Adabas syntax.	parameter will be used as a default if a different device type is not specified. The literal "ADARUN-device" should *not* be specified for the SORTDEV parameter.
underlining	Underlined text identifies default values, wherever appropriate. Otherwise, the defaults are explained in the accompanying parameter descriptions.	**[LRECL = {***record-buffer-length* **| 4000 }]** In the example above, 4000 is the default that will be used for the LRECL parameter if no other record buffer length is specified.
vertical bars (|)	Vertical bars are used to separate mutually exclusive choices. **Note:** In more complex syntax involving the use of large brackets or braces, mutually exclusive choices are stacked instead.	**ADAORD { RESTRUCTUREF | REF }** In the example above, you must select RESTRUCTUREF or REF for this ADAORD function. There are no defaults.
brackets ([ ])	Brackets are used to identify optional elements. When multiple elements are stacked or separated by vertical bars within brackets, only one of the elements may be supplied.	**SORTSEQ =** [*descriptor* **[,MU] [,NU]** | **ISN [, STARTISN =** *value*] | physical-sequence] In this example, the SORTSEQ parameter and the MU, NU, and STARTISN subparameters are optional. **Note:** Note that the mutually exclusive choices for the SORTSEQ parameter are stacked.
braces ({ })	Braces are used to identify required elements. When multiple elements are stacked or separated by vertical bars within braces, one and only one of the elements must be supplied.	{ **SUSPEND** **[TTSYN = {***time-available-to-sync* **| ADARUN-TT }]** **[TRESUME = {***time-until-resume* **| 120 }]** **RESUME** } In this example, either the SUSPEND or RESUME parameter is required. If SUSPEND is specified, either or both TTSYN or TRESUME may be specified.

Convention	Description	Example
indentation	Indentation is used to identify subparameters of a parameter.	SUSPEND [TTSYN = {*time-available-to-sync* | ADARUN-TT }] [TRESUME = {*time-until-resume* | 120 }] RESUME In this example, TTSYN and TRESUME are subparameters of the SUSPEND parameter.
ellipsis (...)	Ellipses are used to identify elements that can be repeated. If the term preceding the ellipsis is an expression enclosed in square brackets or braces, the ellipsis applies to the entire bracketed expression.	[FIELD = '*field-name* [, *option*]... '] ... In this example, the FIELD parameter can be repeated. In addition, more than one option can be associated with a field.
other punctuation and symbols	All other punctuation and symbols must be entered exactly as shown.	[FIELD = '*field-name* [, *option*]... '] ... In this example, the single quotation marks must be specified around the field definitions and their associated options. In addition, options must be separated by commas.

Adabas Utility Syntax

Adabas utilities have the following format:

utility function parameter-list

where:

utility	is the name of the utility to be executed. Examples of utility names include: ADAORD ADADBS ADAINV
function	is the name of the specific utility operation to be executed. For example: ADAORD REORDATA ADADBS ADD ADAINV COUPLE

	Most single-function utilities (ADASEL, ADAULD, etc.) whose function is implicit have either no function value or an optional one.
parameter-list	is a list of parameters following the function. The syntax of the parameters is the same as the syntax used elsewhere in this documentation. For more information, read ***Syntax Conventions***, elsewhere in this document.

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Document Conventions

Convention	Description
Bold	Identifies elements on a screen.
`Monospace font`	Identifies service names and locations in the format *`folder.subfolder.service`*, APIs, Java classes, methods, properties.
`Italic`	Identifies: Variables for which you must supply values specific to your own situation or environment. New terms the first time they occur in the text. References to other documentation sources.
`Monospace font`	Identifies: Text you must type in. Messages displayed by the system. Program code.
{ }	Indicates a set of choices from which you must choose one. Type only the information inside the curly braces. Do not type the { } symbols.
|	Separates two mutually exclusive choices in a syntax line. Type one of these choices. Do not type the | symbol.
[ ]	Indicates one or more options. Type only the information inside the square brackets. Do not type the [ ] symbols.
...	Indicates that you can type multiple options of the same type. Type only the information. Do not type the ellipsis (...).

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3 ADARUN Parameters

Parameter	Use to	Values	Default
ALOGDEV	Specify the device type used for multiple audit log data sets. **Note:** This parameter must be specified with the ALOGSIZE parameter.	Valid device types are listed in *Adabas Device Types and Block Sizes*.	value of the D parameter
ALOGSIZE	Specify the number of blocks available for each audit log in multiple audit log data sets. **Note:** This parameter must be specified with the ALOGDEV parameter.	16 - 16777215	---
AOslog	Log to DDPRINT the commands issued by ADADBS OPERCOM or equivalent AOS functions that modify the active nucleus.	YES | NO	NO
ARExclude	Exclude file(s) from autorestart.	1 - 5000	---
ARMname	Specify the automatic restart management (ARM) program name.	*arm-pgm-name*	---
ARNworkbuffers	Specify the number of WORK I/O buffers allocated during autorestart processing after a failure.	0 - 2147483647	varies based o ADARUN V6 parameter set
ASSOCache	Activate or deactivate controller caching for the Associator component.	YES | NO	YES
ASSOSpacewarn	Identify up to three pairs of threshold percentages and percentage change increments, expressed as percentages of the total ASSO portion of the database. When ASSO space use reaches a specified threshold percentage, a space usage message is issued. In addition, when the ASSO space use changes by the increment specified for that threshold, additional space usage messages are issued.	0-100,1-99	0,5

Parameter	Use to	Values	Default
ASYtvs	Flush buffers asynchronously based on volume serial number.	YES | NO	YES
AUDITING	Enable auditing of Adabas nuclei.	YES | NO	NO
AUDITLOG	Specify whether auditing data of utility and AOS functions should be activated. **Note:** The AUDITLOG parameter is independent and unrelated to the AUDITING ADARUN parameter.	CONSOLE | NO	NO
AUTOCQEnv	Identify the type of user affected by the AUTOCQTIME parameter setting. Only commands from users in the specified environment will be returned from the command queue if they meet the AUTOCQTIME criteria.	ALL | CICS	ALL
AUTOCQTime	Specify the timeout period, in seconds, after which an eligible unprocessed command in the command queue during online recovery will be returned to the user with response code 22 (ADARSP022), subcode 55.	0 (zero) | 1 - 86400	0
AUTOINCASSOSize	Specifies the size, in cylinders or blocks, by which the highest-numbered (last-defined) Associator (ASSO) data set will be increased by an automatic database increase process.	0 - 2147483647 (cylinders) 0B - 2147483647B (blocks)	0
AUTOINCASSOTHreshold	Specifies the Associator space threshold at which Adabas automatically initiates a database increase process. This threshold is expressed as a percentage of used Associator space to total Associator space available in the database.	0, 50 - 100	0
AUTOINCASSOTOtal	Specifies the maximum total size, in cylinders or blocks, of the entire Associator space of the database that is not to be exceeded by automatic database increase processes.	0 - 2147483647 (cylinders) 0B - 2147483647B (blocks)	0
AUTOINCDATASize	Specifies the size, in cylinders or blocks, by which the highest-numbered (last-defined) Data Storage (DATA) data set will be increased by an automatic database increase process.	0 - 2147483647 (cylinders) 0B - 2147483647B (blocks)	0
AUTOINCDATATHreshold	Specifies the Data Storage space threshold at which Adabas automatically initiates a database increase process. This threshold is expressed as a percentage of used Data Storage space to total Data Storage space available in the database.	0, 50 - 100	0

Parameter	Use to	Values	Default
AUTOINCDATATOtal	Specifies the maximum total size, in cylinders or blocks, of the entire Data Storage space of the database that is not to be exceeded by automatic database increase processes.	0 - 2147483647 (cylinders) 0B- 2147483647B (blocks)	0
CACHe	Load ADACSH (Adabas Caching Facility control) during Adabas session initialization.	YES | NO	NO
CACTivate	Control RABN activation. (Adabas Caching Facility)	YES | NO	NO
CASSODsp	Cache an Associator RABN or RABN range in the data space cache. This parameter is mutually exclusive with the CFILE and CXFILE parameters. (Adabas Caching Facility)	*rabn* | *rabn1* - *rabnx*	---
CASSOExt	Cache an Associator RABN or RABN range in the extended memory cache. This parameter is mutually exclusive with the CFILE and CXFILE parameters. (Adabas Caching Facility)	*rabn* | *rabn1* - *rabnx*	---
CASSOG64	Cache an Associator RABN or RABN range backed by 2G large pages in the virtual 64-bit storage cache. This parameter is mutually exclusive with the CFILE and CXFILE parameters. This parameter is available only in z/OS environments.	*rabn* | *rabn1* - *rabnx*	---
CASSOHsp	Cache an Associator RABN or RABN range in the hiperspace cache. This parameter is mutually exclusive with the CFILE and CXFILE parameters. (Adabas Caching Facility)	*rabn* | *rabn1* - *rabnx*	---
CASSOL64	Cache an Associator RABN or RABN range backed by 1M large pages in the virtual 64-bit storage cache. This parameter is mutually exclusive with the CFILE and CXFILE parameters. This parameter is available only in z/OS environments.	*rabn* | *rabn1* - *rabnx*	---
CASSOP64	Cache an Associator RABN or RABN range backed by pageable 1M large pages in the virtual 64-bit storage cache. This parameter is mutually exclusive with the CFILE and CXFILE parameters. This parameter is available only in z/OS environments.	*rabn* | *rabn1* - *rabnx*	---
CASSOV64	Cache an Associator RABN or RABN range in the virtual 64-bit storage cache. This parameter is mutually exclusive with the CFILE and CXFILE parameters. (Adabas Caching Facility)	*rabn* | *rabn1* - *rabnx*	---

Parameter	Use to	Values	Default
CASSOMaxs	Specify the unit size in which areas are allocated for Associator cache space. (Adabas Caching Facility)	80K - 2047M (extended memory, data spaces, or hiperspaces) 1M - your installation limit (virtual 64 memory)	1M (extended memory data spaces, or hiperspaces) 1M (virtual 64 memory)
CBufno	Specify the number of read-ahead buffers for concurrent I/O processing. (Adabas Caching Facility)	0 - the NT parameter value	0
CCtimeout	Specify the cache space area inactivity time limit (in seconds) before it is released back to the system. If demand caching is in effect, use this parameter to specify the inactivity time limit (in seconds) of a RABN range, file or file range, before it is disabled. (Adabas Caching Facility)	60 - 2147483647	7200 seconds (2 hours
CDATADsp	Cache a Data Storage RABN or RABN range in the data space cache. This parameter is mutually exclusive with the CFILE and CXFILE parameters. (Adabas Caching Facility)	*rabn* | *rabn1* - *rabnx*	---
CDATAExt	Cache a Data Storage RABN or RABN range in the extended memory cache. This parameter is mutually exclusive with the CFILE and CXFILE parameters. (Adabas Caching Facility)	*rabn* | *rabn1* - *rabnx*	---
CDATAG64	Cache a Data Storage RABN or RABN range backed by 2G large pages in the virtual 64-bit storage cache. This parameter is mutually exclusive with the CFILE and CXFILE parameters. (Adabas Caching Facility)	*rabn* | *rabn1* - *rabnx*	---
CDATAHsp	Cache a Data Storage RABN or RABN range in the hiperspace cache. This parameter is mutually exclusive with the CFILE and CXFILE parameters. (Adabas Caching Facility)	*rabn* | *rabn1* - *rabnx*	---
CDATAL64	Cache a Data Storage RABN or RABN range backed by 1M large pages in the virtual 64-bit storage cache. This parameter is mutually exclusive with the CFILE and CXFILE parameters. (Adabas Caching Facility)	*rabn* | *rabn1* - *rabnx*	---
CDATAP64	Cache a Data Storage RABN or RABN range backed by pageable 1M large pages in the virtual 64-bit storage cache. This parameter is mutually exclusive with the CFILE and CXFILE parameters.	*rabn* | *rabn1* - *rabnx*	---

Parameter	Use to	Values	Default
	This parameter is available only in z/OS environments. (Adabas Caching Facility)		
CDATAV64	Cache a Data Storage RABN or RABN range in the virtual 64-bit storage cache. This parameter is mutually exclusive with the CFILE and CXFILE parameters. (Adabas Caching Facility)	*rabn* | *rabn1* - *rabnx*	---
CDATAMaxs	Specify the unit size in which areas are allocated for Data Storage cache space. (Adabas Caching Facility)	80K - 2047M (extended memory, data spaces, or hiperspaces) 1M - your installation limit (virtual 64 memory)	1M (extended data spaces, c hiperspaces) 1M (virtual 64 memory)
CDEmand	Set the lowest Adabas buffer efficiency level accepted before caching is activated. A value of "0" indicates that no demand-level caching occurs. (Adabas Caching Facility)	0 - 2147483647	0
CDIspstat	Control whether RABN range statistics display on both the operator console and DDPRINT, or only on DDPRINT. (Adabas Caching Facility)	YES (display on both) | NO (display only on DDPRINT)	YES
CDX*nn*	Specify the user routine of collation descriptor user exits. The *nn* in the parameter name can range from 01 through 08, so up to eight collation descriptor exits may be specified (in any order).	user routine name (up to 8 characters)	---
CExclude	Identify command types that should be excluded from read-ahead caching. More than one command type may be specified by separating values with forward slashes (/). (Adabas Caching Facility)	PHYS | LOGI | HIST | FIND	---

CFile	Select a file or range of files to be cached. This parameter is also used to indicate the class of caching service, the caching scope, and the cache storage type that should be implemented for the file or file range. Specify this parameter using the following syntax:
	
	`CFILE=({fnr ↩`
	`| fnr1-fnrx}[,class][,scope][,cachetype])`
	
	where:
		fnr, *fnr1*, *fnrx*: 0 - n
		
		class: 1 | 2 | 3 | 4 | 5
		
		scope: A | D | B
		
		cachetype: D | E | G | H | L | P | V
			fnr, *fnr1*, *fr*
			
			class: 3
			
			scope: B
			
			cachetype: D

Parameter	Use to	Values	Default
	■ *fnr*, *fnr1*, *fnrx*: valid file numbers. When a range is specified, the lower file number must be specified first (*fnr1*). ■ *class*: The percentage of cache space that can be used, which effectively assigns a priority to the files, with lower priority RABNs being purged first. A value of 1 indicates the highest priority, 5 indicates the lowest priority. ■ *scope*: Identifies the type of caching used: Associator (A), Data Storage (D), or both (B). ■ *cachetype*: Identifies the cache storage type used: data space (D), extended (E), 2G large pages in virtual 64-bit storage (G), hiperspace (H), 1M fixed large pages in virtual 64-bit storage (L), 1M pageable large pages in virtual 64-bit storage (P), or virtual 64-bit storage (V). Virtual 64-bit storage cache is only available in z/OS and z/VSE environments. Large page storage cache (L, P, or G) is only available in z/OS environments. This parameter is mutually exclusive with the CASSO*xxx*, CDATA*xxx* and CSTORAGE parameters. (Adabas Caching Facility)		
CLOGBmax	Specify the maximum size (bytes) of a logged buffer.	368 - 2147483647	4096
CLOGDev	Specify the device type used for multiple command log data sets. This parameter must be specified with the CLOGSIZE parameter.	Valid device types are listed in *Adabas Device Types and Block Sizes*.	value of the DEVICE parameter
CLOGLayout	Specify the format of the Adabas command log.	8	8
CLOGMAx	Specify the maximum size (bytes) of all of the logged buffers allowed for an Adabas command.	368 - 2147483647	16384
CLOGMRg	Indicate whether the Adabas cluster should run with an automatic CLOG merge. (Adabas Cluster Services, Adabas Parallel Services)	YES | NO	NO
CLOGSize	Specify the number of blocks available for each command log in multiple command log data sets. This parameter must be specified with the CLOGDEV parameter.	16 - 16777215	---
CLUCACHEExtra	Specify the additional vector size, in blocks, required to allow Adabas Cluster Services and Adabas Parallel Services to track the blocks held by Adabas Caching Facility in the different cluster nuclei. (Adabas Cluster Services, Adabas Parallel Services)	0 - 2147483647	1000

Parameter	Use to	Values	Default
CLUCACHEName	Identifies the name of the Adabas cluster cache structure/area in which the current nucleus participates. (Adabas Cluster Services)	*cluster-name*	---
CLUCACHESize	Specify the amount of storage to allocate for the global cache area that services the Adabas Parallel Services cluster in which the current nucleus participates. (Adabas Parallel Services)	128K - varies (depending on the cache type specified by the CLUCACHETYPE parameter)	---
CLUCACHEType	Identify the virtual storage type for the global cache area: shared dataspace (DSP), virtual 64-bit storage (V64), virtual 64-bit cache backed by page-fixed two-gigabyte (2G) large pages (G64), virtual 64-bit cache backed by page-fixed one-megabyte (1M) large pages (L64), or virtual 64-bit cache backed by pageable one-megabyte (1M) large pages (P64). The G64, L64, and P64 values for this parameter are available in z/OS environments only. The V64 value for this parameter is available in z/OS and z/VSE environments only. (Adabas Parallel Services)	DSP | G64 | L64 | P64 | V64	DSP
CLUCACHEUnchanged	Indicate whether unchanged blocks are written to global cache during Adabas Parallel Services processing. (Adabas Parallel Services)	YES | NO	NO
CLUGroupname	Specify the XCF messaging group name in Adabas Cluster Services or the name of the messaging group in Adabas Parallel Services. (Adabas Cluster Services, Adabas Parallel Services)	*groupname*	none in Adaba Services; the n name in Adab Parallel Servi
CLULOCKName	Specify the lock structure name defined in the CFRM policy or the global lock area in which the current nucleus participates. (Adabas Cluster Services)	*lockstructurename*	---
CLULOCKSize	Specify the amount of storage allocated for the global lock area. Specify values for this parameter using the following syntax: *nnn*[K | M | G] where *nnn*: the number of bytes (no unit specification), kilobyte (K), megabytes (M), or gigabytes (G).	131072 - 2147483147 (bytes) 128K - 2097152K 128K - 2048M 128K - 2G	---

Parameter	Use to	Values	Default
	(Adabas Parallel Services)		
CLUPublprot	Specify whether or not cluster nuclei make their protection data available within the cluster before they make the related updates available to the other nuclei. (Adabas Cluster Services, Adabas Parallel Services)	YES | NO	NO
CLUSter	Indicate whether the Adabas nucleus will participate in a cluster of nuclei working on the same database, and, if so, the type of cluster in which it will participate. Valid values are "NO" (nucleus not participating in a cluster), "LOCAL" (nucleus participating in a cluster on the same operating system image), and "SYSPLEX" (nucleus participating in a cluster on different systems in a parallel sysplex). (Adabas Cluster Services, Adabas Parallel Services)	NO | LOCAL | SYSPLEX	NO
CLUWork1cache	Specify the maximum number of WORK blocks that the cluster nucleus should keep in the global cache at a time.	0 - 32767	0
CMAXcsps	Specify the number of storage areas that can be allocated for ADACSH cache space in data spaces, hiperspaces, or virtual 64-bit storage. This parameter has no affect on a cache space in extended memory, where only one Associator and one Data Storage area are allowed. (Adabas Caching Facility)	1 - 16	8
CRetry	Specify the number of seconds between Adabas Caching Facility attempts to acquire an area of cache space if the previous GETMAIN or space allocation failed. (Adabas Caching Facility)	60 - 2147483647	900 (15 minutes)
CStorage	Identify the type of cache space to which all RABNs for the database are cached (using system defaults). This parameter overrides the use of the CASSO*xxx* and CDATA*xxx* ADARUN parameters. Valid values are "DATASPACE" (dataspace), "EXTENDED" (extended memory), "HIPERSPACE" (hiperspace), "G64" (2G large pages in virtual 64-bit storage), "L64" (fixed 1M large pages in virtual 64-bit storage), "P64" (pageable 1M large pages in virtual 64-bit storage), or "VIRTUAL64" (virtual 64-bit storage). "EXTENDED" is the only option available on BS2000 RISC machines; "HIPERSPACE", "G64", "L64", and "P64" are only valid in z/OS environments; "VIRTUAL64" is only valid in z/OS and z/VSE environments.	DATASPACE | EXTENDED | G64 | HIPERSPACE | L64 | P64 | VIRTUAL64	---

Parameter	Use to	Values	Default
	This parameter is mutually exclusive with the CFILE and CXFILE parameters. (Adabas Caching Facility)		
CT	Specify the maximum time limit (in seconds) for interregion communication of results from Adabas to the user.	1 - 2147483647	60
CWORKStorage	Identify the type of cache space used for Adabas Caching Facility work areas CWORK2FAC and CWORK3FAC. Valid values are "DATASPACE" (dataspace), "EXTENDED" (extended memory), "G64" (2G large pages in virtual 64-bit storage), "HIPERSPACE" (hiperspace), "L64" (fixed 1M large pages in virtual 64-bit storage), "P64" (pageable 1M large pages in virtual 64-bit storage), or "VIRTUAL64" (virtual 64-bit storage). "EXTENDED" is the only option available on BS2000 RISC machines; "HIPERSPACE", "G64", "L64", and "P64" are only valid in z/OS environments; "VIRTUAL64" is only valid in z/OS and z/VSE environments. (Adabas Caching Facility)	DATASPACE | EXTENDED | G64 | HIPERSPACE | L64 | P64 | VIRTUAL64	---
CWORK2fac	Specify the percentage of Work part 2 to be cached. If "0" is specified, Work part 2 is not cached. (Adabas Caching Facility)	0 - 100	0
CWORK3fac	Specify the percentage of Work part 3 to be cached. If "0" is specified, Work part 3 is not cached. (Adabas Caching Facility)	0 - 100	0
CXfile	Select a file or range of files to be excluded from caching. Specify this parameter using the following syntax: `CXFILE=({fnr | fnr1-fnrx}[,,scope])` where: ■ *fnr*, *fnr1*, *fnrx*: valid file numbers to be excluded. When a range is specified, the lower file number must be specified first (*fnr1*). ■ *scope*: Identifies the scope of exclusion: Associator RABNs only excluded (A), Data Storage RABNs only excluded (D), or both types of RABNs excluded (B). If a scope is specified, you must specify two commas before it.	*fnr*, *fnr1*, *fnrx*: 0 - n *scope*: A | D | B	*fnr*, *fnr1*, *fr* *scope*: B

Parameter	Use to	Values	Default
	This parameter is mutually exclusive with the CASSO*xxx*, CDATA*xxx*, and CSTORAGE ADARUN parameters. (Adabas Caching Facility)		
DATACache	Control whether caching control is enabled (YES) or disabled (NO) for the Data Storage data set.	YES | NO	YES
DATASpacewarn	Identify up to three pairs of threshold percentages and percentage change increments, expressed as percentages of the total Data Storage portion of the database. When Data Storage space use reaches a specified threshold percentage, a space usage message is issued. In addition, when the Data Storage space use changes by the increment specified for that threshold, additional space usage messages are issued.	0-100,1-99	0,5
DBid	Specify the physical database ID of the database. **Note:** If you specify the DBID parameter, you must also specify the ADARUN SVC parameter.	1 - 65535	1
DEVIce	Specify the device type on which the first block of the Associator is stored. Valid device types for each platform are listed in *Adabas Device Types and Blocks Sizes*.	*devtype*	3390
DIrratio	Together with the ELEMENTRATIO ADARUN parameter, define the ratio of directory entries to data elements in Adabas cluster environments. (Adabas Cluster Services, Adabas Parallel Services)	1 - 32767	1
DSF	Enable Adabas Delta Save support. (Adabas Delta Save)	YES | NO	NO
DSFEx1	Specify the user routine to be given control by Adabas Delta Save. (Adabas Delta Save)	*exitname*	---
DTp	Indicate whether to enable distributed transaction processing, and, if so, whether the nucleus should be a resource or transaction manager. Valid values are NO (distributed transaction processing is not enabled), RM (the nucleus participates in distributed transaction processing as a resource manager), and TM (the nucleus participates in distributed transaction processing as a transaction manager). (Adabas Transaction Manager)	NO | RM | TM	NO

Parameter	Use to	Values	Default
DUALALD	Specify the device type to be used for dual audit logging.	*devtype*	value of the D parameter
DUALALS	Specify the number of blocks available for each dual audit log.	16 - 16777215	---
DUALCLD	Specify the device type to be used for dual command logging. Valid device types for each platform are listed in *Adabas Device Types and Blocks Sizes*.	*devtype*	value of the D parameter
DUALCLS	Specify the number of blocks available for each dual command log.	16 - 16777215	---
DUALPLD	Specify the device type to be used for dual protection logging. Valid device types for each platform are listed in *Adabas Device Types and Blocks Sizes*.	*devtype*	value of the D parameter
DUALPLS	Specify the number of blocks available for each dual protection log.	16 - 16777215	---
ELementratio	Together with DIRRATIO ADARUN parameter, define the ratio of directory entries to data elements in Adabas cluster environments. Adabas Cluster Services, Adabas Parallel Services	1 - 32767	1
EXcpvr	Indicate whether EXCP or EXCPVR should be used when running APF-authorized.	YES | NO	YES
FAstpath	Enable Adabas Fastpath support. (Adabas Fastpath)	YES | NO	NO
FMxio	Set a limit on the number of I/O operations that can be started in parallel by LFIOP flush processing. The full meaning of this parameter varies, depending on the setting of the ASYTVS ADARUN parameter. If ASYTVS=YES, you can use FMXIO to set the limit on the number of I/O ■ If ASYTVS=YES, you can use FMXIO to set a limit on the number of I/O operations to be started in parallel on each volume. ■ If ASYTVS=NO, you can use FMXIO to set a limit on the number of I/O operations to be started in parallel overall.	1 - 16 (ASYTVS=YES) 1 - 100 (ASYTVS=NO)	1 (ASYTVS=Y 60 (ASYTVS=
FOrce	Indicate whether the nucleus or Adabas Review hub can overwrite an existing ID table entry.	YES | NO	NO
HEX*nn*	Specify the hyperdescriptor exit(s) and associated user routine to be used by the nucleus. Specify this parameter using the following syntax: HEX*nn*=*user-routine-name*	■ *nn*: 01 - 31 ■ *user-routine-name*: text (up to eight characters)	■ *nn*: --- ■ *user-routi* ---

Parameter	Use to	Values	Default
	where: ■ *nn*: the number of the hyperdescriptor exit ■ *user-routine-name*: the name (up to eight characters) of the user routine that gets control for the associated hyperdescriptor exit.		
IGNDIb	Indicate whether an active nucleus entry in the data integrity block (DIB) should be ignored and deleted.	YES | NO	NO
IGNDTp	Indicate whether the two-phase commit area (Work part 4) should be ignored.	YES | NO	NO
INDEXCrosscheck	Indicate whether index cross-checking is turned on or off. Index cross-checking is a process Adabas uses to ensure that a data storage record it is reading actually matches the descriptor value in the index by which the record was found.	YES | NO	YES
INDEXUpdate	Indicate whether to use the original or advanced index update processing rules.	ORIGINAL | ADVANCED	ORIGINAL
INFobuffersize	Specify the size of the information buffer pool, in bytes. The information buffer pool is also known as the Adabas event log.	0 or 1024 - 2147483647	0 (buffer will not be allocated)
INTAuto	Specify the time interval (in seconds) between autorestart progress messages, which will be printed in addition to the standard messages at the end of each autorestart phase, if the phase takes longer than the interval specified. The default (0 seconds) indicates that autorestart progress messages should only be printed at the completion of each autorestart phase.	0 - 2147483647	0
INTNas	Specify the time interval (in units of 1.048576 seconds) between SYNS 60 checkpoints.	1 - 2147483647	3600 (approximately one hour)
LAP	Specify the size of the Auditing Pool.	minimum 20000	100000 (if AUDITING=YES) or 0 (i AUDITING=NO)
LARgepage	Indicate whether the Adabas nucleus should use page-fixed one-megabyte (1M) large pages above the two-gigabyte (2G) bar (L64), page-fixed 2G large pages above the 2G bar (G64), or pageable one-megabyte (1M) large pages (P64). A value of "YES" is equivalent to specifying "L64". A value of "NO" indicates that virtual storage above the 2G bar will be backed by four-kilobyte (4K) pages. Values of "G64", "L64", and "YES" can only be specified if the ADARUN V64BIT parameter is also set to "YES".	G64 | L64 | P64 | NO | YES	NO

Parameter	Use to	Values	Default
	In addition, the operating system must support large pages of the required type. **Note:** At this time, this parameter is applicable only to z/OS systems.		
LBP	Specify the maximum number of bytes to be used for the Adabas buffer pool during a session.	80000 - 2147483647	350000
LCP	Specify the maximum number of bytes to be used for the Adabas security pool during a session.	2000 - 2147483647	10000
LDEuqp	Specify the number of bytes to be used for the unique (UQ) descriptor pool during a session.	5000 - 2147483647	5000
LDTp	Define the length of the distributed transaction processing area (Work part 4) or the index of Work part 4: If you have Adabas Transaction Manager Version 7.4 or earlier installed, this parameter defines the length of the distributed transaction processing area (Work part 4) for use with DTP=RM. If you have Adabas Transaction Manager Version 7.5 or later installed, this parameter defines the size (in blocks) of the Work part 4 index which is used to administer the data on Work part 4 (DDWORKR4). (Adabas Transaction Manager)	Adabas Transaction Manager 7.4 or earlier: 0 - 65535 Adabas Transaction Manager 7.5 or later: 8 - one eighth of the WORK4 size	Adabas Trans Manager 7.4 c 0 Adabas Trans Manager 7.5 c
LFIop	Enable asynchronous buffer flush operations and define the length of the related buffer flush pool. A value of "0" disables asynchronous buffer flush operations; only synchronous flushing occurs. A value of "1" enables asynchronous buffer flush operations, and defines the buffer pool size as 25% of the buffer pool (LBP parameter) size. Any other value (with a minimum of 80000 allowed) enables asynchronous buffer flush operations and defines the size of the pool directly (in bytes).	0 | 1 | 80000 - 18446744073709551615 (although this is really limited by the available amount of virtual and real memory)	0
LFP	Specify the size (in bytes) of the Adabas internal format buffer pool.	6000 - 2147483647	12000
LI	Specify the size (in bytes) allocated for the table of ISNs (TBI) used to store ISN lists (overflow ISNs or saved ISN lists).	2000 - 2147483647	10000

Parameter	Use to	Values	Default
LNKGNAME	The name of the link globals table to be employed by an Adabas 8 batch/TSO link routine. **Note:** If you specify the LNKGNAME parameter, you must also specify the ADARUN DBID and SVC parameters.	valid module name for an IBM z/OS operating system	LNKGBLS
LOCal	Indicate whether an Adabas nucleus or Adabas Review hub is isolated and available for local use only. The isolated nucleus or hub will be unknown to the network.	YES | NO	YES
LOGAbdx	Indicate whether Adabas buffer descriptions (ABDs) should be logged during this session. For the dependencies of the various logging parameters, please review the detailed description.	YES | NO	NO
LOGCB	Indicate whether Adabas extended control blocks (ACBX) should be logged during this Adabas session. For the dependencies of the various logging parameters, please review the detailed description.	YES | NO	NO
LOGCLex	Indicate whether the Adabas command log extension (CLEX) should be logged. For the dependencies of the various logging parameters, please review the detailed description.	YES | NO	NO
LOGFb	Indicate whether Adabas format buffers (FB) should be logged.	YES | NO	NO
LOGGing	Indicate whether command logging should be used for the Adabas session. If this is set to "NO", all other LOG*xxxx* parameters are ignored.	YES | NO	NO
LOGIB	Indicate whether Adabas ISN buffers (IB) should be logged.	YES | NO	NO
LOGIO	Indicate whether Adabas I/O activity should be logged.	YES | NO	NO
LOGMb	Indicate whether Adabas multifetch buffers (MB) should be logged. For the dependencies of the various logging parameters, please review the detailed description.	YES | NO	NO
LOGRb	Indicate whether Adabas record buffers (RB) should be logged.	YES | NO	NO
LOGSB	Indicate whether Adabas search buffers (SB) should be logged.	YES | NO	NO
LOGSIze	Specify the maximum block size for the sequential command log.	100 - 32760	value of the QBLKSIZ ADARUN parameter
LOGUX	Indicate whether Adabas user exit B data should be logged. For the dependencies of the various logging parameters, please review the detailed description.	YES | NO	NO

Parameter	Use to	Values	Default
LOGVB	Indicate whether Adabas value buffers (VB) should be logged.	YES | NO	NO
LOGVOlio	Indicate whether the extended I/O list should be written to the command log for CLOGLAYOUT=8.	YES | NO	NO
LOGWarn	Specify the frequency, in seconds, at which the PLOG and CLOG status is checked and resulting alert messages are produced. This parameter is optional, but a valid user exit 2 or user exit 12 must also be specified when this parameter is set to any value other than zero (0). A value of zero (0), the default, indicates that no CLOG and PLOG status checks should occur and that no alert messages should be produced. Any other valid LOGWARN value represents the interval (in seconds) at which the PLOG and CLOG status is checked and resulting alert messages are produced.	0 - 2147483647	0
LP	Specify the number of blocks to allocate to the data protection area (Work part 1). The highest value you can set for this parameter is limited by the size of the Work data set and the sizes of Work parts 2, 3, and 4.	200 - *	1000
LQ	Specify the size (in bytes) of the table of sequential commands, which contains entries required during the processing of Adabas read sequential (L2/L5, L3/L6, and L9) commands.	2000 - 2147483647	10000
LRDp	Specify the size (in bytes) of the redo pool, which allows for deferred publishing. If the value of this parameter is set to 0, updated database blocks are always written to global cache at the time the update is made; no deferred publishing occurs. (Adabas Cluster Services, Adabas Parallel Services)	0 | 80000 - 2137483647	For Adabas P Services 8.2 or default is 0 (z For Adabas C Services 8.2 or default is eith value of the A LFIOP param megabytes, w is smaller. For earlier rel Adabas Paral Services and Cluster Servic default is the the ADARUN parameter.

Parameter	Use to	Values	Default
LRP1	Specify the size of the Adabas or Event Replicator replication pools, in bytes. This parameter should be specified for only: ■ an Adabas nucleus that also has REPLICATION=YES set. ■ an Event Replicator database The values for the Adabas nucleus and the Event Replicator database may be different.	20000 - *	100000 (if REPLICATION=YES) 0 (if REPLICATION=NO)
LS	Specify the maximum number of bytes for internal sort processing. **Note:** To ensure that a single search command does not use too much of the work pool space, the maximum LS value must be less than or equal to the LWP (work pool length) divided by two minus the minimum LS value (19968) (LS = LWP/2 - 19968).	19968 - *	49920
LSF	Indicate whether Logical Save Facility should be enabled (YES) or disabled (NO) for the nucleus.	YES | NO	NO
LTZ	Specify the size of the time zone pool used by a user session, in bytes.	0, 12288 - 2147483647	32768
LU	Specify the length (in bytes) of the intermediate user buffer area. The range of values varies based on the operating system on which Adabas is installed.. On z/OS systems, LU cannot exceed a value greater than that produced by this calculation: (*NABvalue* x 4096)	a positive integer, minimum and maximum governed by the operating system.	65535
LWKP2	Specify the number of Work blocks to use for intermediate ISN lists Work part 2).	0 - 16777215	0
LWP	Specify the size (in bytes) of the Adabas work pool. This value must be equal to or greater than twice the sum of the specified internal sort area length (LS parameter) plus the minimum LS value (19968). In other words, the LWP value must be greater than or equal to a value calculated as follows: (*LS-value* + 19968)x 2 The minimum value you can specify is 80000 or a value not less than the value of the NT parameter multiplied by 25000.	80000-2147483647	150000
MLwto	Specify whether multi-line messages that are normally written to the operator console as a series of single-line	YES | NO	NO

Parameter	Use to	Values	Default
	write-to-operator (WTO) messages should instead appear as multi-line WTO messages. (Event Replicator for Adabas only)		
MODe	Identify the Adabas operating mode. Valid operating modes include running in single-user mode (SINGLE) or running in multiuser mode (MULTI).	SINGLE | MULTI	MULTI
MSGBuf	Specify the size (in kilobytes) of the message buffer area, which is used to buffer messages for use for performance and tuning and problem analysis.	0 - 128	0
MSGConsl	Specify the case of Adabas messages sent to the console.	Upper | Mixed	Mixed
MSGDruck	Specify the case of Adabas messages sent to the DD/DRUCK data set.	Upper | Mixed	Mixed
MSGPrint	Specify the case of Adabas messages sent to the DD/PRINT data set.	Upper | Mixed	Mixed
MXCANCEL	Specify the timeout threshold, in seconds, in which processing of an intracluster cancellation request must occur. Adabas Cluster Services, Adabas Parallel Services	15 - 2147483647	The value of t parameter.
MXCANCELWarn	Specify the timeout threshold, in seconds, for an intracluster cancellation request to occur before issuing an early warning about the failure of the cancellation request. The value of this parameter must be less than the value of the MXCANCEL parameter. A value of "0" indicates that no warnings should be issued. Adabas Cluster Services, Adabas Parallel Services	0 | 4 - (*MXCANCEL_value* - 1)	The value of t MXCANCEL pa divided by 4.
MXMSG	Specify the timeout threshold, in seconds, in which the processing of an intracluster command must occur. Adabas Cluster Services, Adabas Parallel Services	15 - 32767	300
MXMSGWarn	Specify the timeout threshold, in seconds, for a response to an intracluster command to occur before issuing an early warning about the failure of the request. The value of this parameter must be less than the value of the MXMSG parameter. A value of "0" indicates that no warnings should be issued. Adabas Cluster Services, Adabas Parallel Services	0 | 4 - (*MXMSG_value* - 1)	The value of t parameter div 4.

Parameter	Use to	Values	Default
MXStatus	Specify the interval, in seconds, at which the member-level XCF status monitoring heartbeat should occur. A value of "0" indicates that no member-level status monitoring should occur. Adabas Cluster Services	0 | 15 - 21474836	15
MXTNa	Set the maximum non-activity time, in seconds, that can be specified in the OP command for an individual user.	1 - 65535	3600
MXTSx	Set the maximum execution time (in seconds) that can be specified for the ADARUN TLSCMD parameter and for any override execution time setting that might be specified in the Adabas control block of an OP command.	1 - 65535	3600
MXTT	Set the maximum transaction time limit, in seconds, that can be specified in the OP command for an individual user.	1 - 65535	3600
MXWtor	Specify the timeout interval, in seconds, in which an operator response to a self-termination operator query must occur before issuing a warning. A value of "0" indicates that no warning message should be issued. Adabas Cluster Services	0 | 15 - 64800	0
NAb	Specify the number of attached buffers to be used during the session. The maximum value you can specify for this parameter varies, depending on the amount of available virtual storage.	1 -varies	16
NALOG	Specify the maximum number of audit log data sets to be opened and logged in the PPT for the session.	0 | 2 - 8	0
NC	Specify the maximum number of command queue elements (CQEs) for the session. The number of CQEs established for the session determines the maximum number of Adabas commands that may be queued or be in process at any one time during the session.	20 - 32767	200
NCLog	Specify the maximum number of command log data sets to be opened and logged in the PPT for the session. A value of "0" disables this parameter.	0 | 2 - 8	0
NH	Specify the maximum number of hold queue elements for the session.	20 - 16777215	500
NIsnhq	Specify the maximum number of records that can be placed in hold status (hold queues) at the same time	1 - 16777215 (NH parameter maximum)	20 | (NH/NU) * 2 (whichever is larger)

Parameter	Use to	Values	Default
	by a single user. The maximum value that can be specified for this parameter is the value set for the NH ADARUN parameter (which has a maximum value of 16777215). The default is the larger of 20 or the value of the NH parameter divided by the value of the NU parameter with the result multiplied by two ((NH/NU) * 2).		
NOndes	Indicate whether to allow (YES) searches using nondescriptors in search buffers.	YES | NO	YES
NPLOG	Specify the maximum number of protection log data sets to be opened and logged in the PPT. A value of "0" disables this parameter.	0 | 2 - 8	0
NPLOGBuffers	Specify the number of PLOG protection I/O buffers allocated in the Adabas nucleus session. PLOG protection I/O buffers are only allocated when ADARUN parameter LFIOP is set to a nonzero value.	1 - 2,147,483,687	1
NQcid	Specify the maximum number of active command IDs per user.	1 - 65535	20
NSisn	Specify the maximum number of ISNs per ISN table (TBI) element. The maximum value that can be specified varies based on the device type of the Work data set or, in the case where user-defined Work block sizes are used, the maximum value is based on a formula. For more information, refer to the more detailed NSISN documentation.	7 - *	51
NT	Specify the number of threads to be used during the Adabas session.	4 - 250	5
NU	Specify the maximum number of user queue elements for the Adabas session.	20 - 16777215	200
NUCid	Specify the ID of an Adabas nucleus in an Adabas cluster. Adabas Cluster Services, Adabas Parallel Services	0 - 65000	0
NWork1buffers	Specify the number of Work part 1 protection I/O buffers allocated in the Adabas nucleus session. Work part 1 protection I/O buffers are only allocated when ADARUN parameter LFIOP is set to a nonzero value.	1 - 2,147,483,687	1
OPenrq	Indicate whether an open command (OP) must be issued (is required) as the first command of a user session.	YES | NO	YES
PAmreqs	BS2000 only. Set the maximum number of PAM blocks that can be transferred in one PAM macro request. The default can be reduced to avaoid the recipt of I/O	1 - 1024	80

Parameter	Use to	Values	Default
	errors DMS09AC -- too many simultaneous I/O requests on some machines.		
PGfix	Indicate whether pages containing I/O control blocks are released after I/O processing is completed or after the job has ended when using EXCPVR on z/OS systems. When this parameter is set to *YES*, pages containing the I/O control blocks are fixed for the duration of the job. When set to "NO", pages are fixed only for the duration of I/O processing.	YES | NO	NO
PLOGDev	Specify the device type used for multiple protection log data sets. This parameter must be specified with the PLOGSIZE parameter.	Valid device types are listed in *Adabas Device Types and Block Sizes*	value of the DEVICE parameter
PLOGRq	Indicate whether a protection log is required for the Adabas session. For details on the meanings of the different values for this parameter, refer to the detailed PLOGRQ documentation.	YES | NO | SEL | FORCE	YES
PLOGSIze	Specify the number of blocks available for each protection log in multiple protection log data sets. This parameter must be specified with the PLOGDEV parameter.	16 - 16777215	---
PREFEtch	Indicate whether the Adabas command-level prefetch or multifetch features should be automatically enabled. YES enables the multifetch (M) option; OLD enables the prefetch (P) option; NO disables the prefetch feature.	YES | OLD | NO	NO
PREFICmd	Identify the commands that should be included in prefetch or multifetch processing. To specify multiple values for this parameter, list the values separated by forward slashes (/). For example: PREFICMD=L3/L9. The maximum number of entries is 50. The same number of list items must be specified for this parameter as are specified for the PREFIFIL parameter. If you want several commands to be prefetched or multifetched for a single file, repeat the same file number in the PREFIFIL parameter. The values for this parameter are used in conjunction with the value of the PREFIFIL parameter to customize prefetch and multifetch processing during the session. You cannot specify this parameter in the same session as the PREFXCMD parameter; if you do, the values of the PREFXCMD parameter are used and the values for this parameter are ignored.	L1 - L9	---
PREFIFil	Identify the files that should be included in prefetch or multifetch processing. To specify multiple values	1 - 5000	---

Parameter	Use to	Values	Default
	for this parameter, list the values separated by commas. The maximum number of entries is 50. The same number of list items must be specified for this parameter as are specified for the PREFICMD parameter. If you want several commands to be prefetched or multifetched for a single file, repeat the same file number in the PREFIFIL parameter. The values for this parameter are used in conjunction with the value of the PREFICMD parameter to customize prefetch and multifetch processing during the session. You cannot specify this parameter in the same session as the PREFXFIL parameter; if you do, the values of the PREFXFIL parameter are used and the values for this parameter are ignored.		
PREFNrec	Specify the number records that can be prefetched or multifetched. The maximum number of records that can be multifetched depends on the maximum that can be held by the record and ISN buffers.	0 - *	0
PREFSBl	Specify the size, in bytes, of the internal buffer used by multifetch/prefetch processes, which determines how much record data is prefetched.	1024 - *<PREFTBL value>*	3000
PREFSTdd	Specify the job statement label (DD name) in the nucleus startup job that defines the location to which multifetch statistics should be written.	*ddname*	---
PREFTbl	Specify the size, in bytes, of the total prefetch buffer area.	6144 - 2147483647	30000
PREFXCmd	Identify the commands that should be *excluded* in prefetch or multifetch processing. To specify multiple values for this parameter, list the values separated by forward slashes (/). For example: PREFXCMD=L3/L9. The maximum number of entries is 50. The same number of list items must be specified for this parameter as are specified for the PREFXFIL parameter. If you want several commands to be prefetched or multifetched for a single file, repeat the same file number in the PREFXFIL parameter. The values for this parameter are used in conjunction with the value of the PREFXFIL parameter to customize prefetch and multifetch processing during the session. You cannot specify this parameter in the same session as the PREFICMD parameter; if you do, the values of this parameter are used and the values for the PREFICMD parameter are ignored.	L1 - L9	---

Parameter	Use to	Values	Default
PREFXFil	Identify the files that should be excluded in prefetch or multifetch processing. To specify multiple values for this parameter, list the values separated by commas. The maximum number of entries is 50. The same number of list items must be specified for this parameter as are specified for the PREFXCMD parameter. If you want several commands to be prefetched or multifetched for a single file, repeat the same file number in the PREFXFIL parameter. The values for this parameter are used in conjunction with the value of the PREFICMD parameter to customize prefetch and multifetch processing during the session. You cannot specify this parameter in the same session as the PREFXFIL parameter; if you do, the values of the PREFXFIL parameter are used and the values for this parameter are ignored.	1 - 5000	---
PROGram	Identify the program to be run.	ADACOM | ADANUC | ADAREV | NETWRK | RENTUSER | USER | *utility-name*	USER
QBlksize	Specify the block size, in bytes, for sequential data sets used by ADAIOR, the Adabas I/O component. A value of "0" does not indicate that 0-byte block sizes should be used, but that the block size should be determined by the media type. For more information, read the detailed QBLKSIZE documentation.	0 - 262144	0
REAdonly	Indicate whether the Adabas session is a read-only session or it should permit database updates.	YES | NO	NO
REFstprt	Indicate whether statistics should be printed after they are refreshed after an ADADBS REFRESHSTATS utility function run or after interval statistics have been refreshed using Adabas Online System (option **R** in **Session Monitoring**).	YES | NO	YES
REPlication	Indicate whether replication should be activated for the Adabas nucleus. (Event Replicator for Adabas)	YES | NO	NO
REVBUFMB	Specify the size of the Review Buffer Pool used as temporary storage when sending the CLOG records via Network (ADALNK) to the Review Hub. (Adabas Review)	1 - 1024	10

Parameter	Use to	Values	Default
REVFilter	Indicate whether Adabas Review record filtering should be allowed during the session. (Adabas Review)	YES | NO	YES
REVIew	Indicate whether Adabas Review should be run in local mode, hub mode (specifying the hub ID), or not at all. (Adabas Review)	NO | LOCAl | *hubid*	NO
REVLOGBmax	Specify the maximum allowable number of bytes of a logged buffer for Adabas Review. (Adabas Review)	0 - 30000	5120
REVLOGMax	Specify the maximum size of all of the logged buffers allowed for an Adabas Review command. (Adabas Review)	2000 - 32764 (32K - 4)	16384
REVLOGNR	Hub mode: Specify whether the CLOG records are sent as buffered records or as single records via Network (ADALNK) to the Review Hub. Local mode: Specify the CLOG record after which the REVIEW subtask is posted for processing.	0 - 64	Hub mode:0 Local mode: 1
REVSTHMV	Specify whether the ADARMT/ADRST interface or the ADARMX/ADARSX interface is used to send data via Network (ADALNK) to the Review Hub.	V52 V53	V52
REVTIMER	Hub mode: Specify the largest delay for sending buffered CLOG records via Network (ADALNK) in case of low database activity. Local mode: Send the CLOG records to the Review hub after no later than *N* seconds.	1 - 60	1
RIafterupdate	Indicate whether Adabas should suppress the response code 113 (ADARSP113) subcode 5 and response code 2 (ADARSP002) subcode 5 that are returned when an application issues an RI command for a record that has been updated in the current transaction. The RI command returns response code 0 instead, but does not release any updated records from hold.	YES | NO	NO

Parameter	Use to	Values	Default
RPLCONNECTCount	Specify the number of connection attempts made for the Adabas or Event Replicator Server nucleus after an attempt fails.	0 - 2147483647	0
RPLCONNECTInterval	Specify the interval (in seconds) between connection attempts made for the Adabas or Event Replicator Server nucleus after an attempt fails.	0 - 2147483647	0
RPLParms	Identify the location where your replication definitions (initialization parameters) should be read from. Replication definitions can be read from the Replicator system file (FILE), from DDKARTE (PARMS), both the Replicator system file and from DDKARTE (where the DDKARTE specifications override any duplicates with the Replicator system file), or not at all (NONE). (Event Replicator for Adabas)	BOTH | FILE | NONE | PARMS	If the Replicator system file resides on the Event Replicator database, definitions are read first from the Replicator system file and then from DDKARTE. If the Replicator system file does not reside on the Event Replicator database, the definitions are read from DDKARTE.
RPLSort	Indicate whether Event Replicator for Adabas transaction data sorting should occur. (Event Replicator for Adabas)	YES | NO	YES
RPWARNINCrement	Specify the interval (in percentage of LRPL usage) at which warning messages should be sent indicating that the replication pool usage has exceeded the threshold set by the RPWARNPERCENT parameter. (Event Replicator for Adabas)	1 - 99	10
RPWARNINTerval	Specify the interval, in seconds, during which replication pool usage warning messages are suppressed on the console. (Event Replicator for Adabas)	1 - 2147483647	60
RPWARNMessagelimit	Specify the number of replication pool usage warning messages that can be issued to the console before message suppression begins. (Event Replicator for Adabas)	1 - 2147483647	5
RPWARNPercent	Specify the threshold for replication pool usage (expressed as a percentage of LRPL) at which replication pool usage warning messages should be sent. A value of *0* for this parameter indicates that no warning messages are issued. (Event Replicator for Adabas)	0 - 99	0

Parameter	Use to	Values	Default
	.		
RVclient	Specify whether Adabas Review client reporting should be activated in batch environments. **Note:** This ADARUN parameter is valid only in z/OS environments and only when ADARUN PROGRAM=USER. (Adabas Review)	ACTIVE | INACTIVE	INACTIVE
SEcuid	Specify the requirement level of security system user IDs for a database. Using it you can indicate how Adabas handles calls from users without a security system user ID or with a security system user ID that changed during the Adabas session.	ALLOW | REQUIRE | WARN	ALLOW
SMF	Specify whether or not Adabas SMF recording should be enabled.	YES | NO	NO
SMF89	Specify whether or not the Adabas nucleus should register with z/OS for type 89 SMF records.	YES | NO	NO
SMFDETAIL	Specify the type of detail sections in SMF Interval and Termination records (subtypes 2 and 3) that should be included in Adabas SMF records. All specifications (regardless of how many) for this parameter should be enclosed in parentheses. When NONE or ALL are specified for this parameter, they should be specified alone; no other values can be combined with NONE or ALL. Valid detail section names are ALL, CMD, FILE, IODD, NONE, PARM, SESS, STG, THRD, ZIIP and USER. List of section names must be separated by commas. In cluster environments (Adabas Cluster Services and Adabas Parallel Services), additional detail section names can be specified: CSHB, CSHF, CSHG, CSHP, LOCK, MSGB, MSGC, and MSGH.	(NONE | ALL | *section-name-list*)	(NONE)
SMFINTERVAL	Specify whether SMF interval records should be generated and the interval at which they should be generated.	NONE | GLOBAL | SUBSYS | *minutes*	NONE
SMFRECNO	Specify the Adabas SMF record number used for user-defined SMF records.	128 - 255	255
SMFSUBSYS	Specify the name of the IBM or user-defined SMF subsystem from PARMLIB member SMFPRM*xx*.	CURRENT | *subsystem-name*	CURRENT
SMGt	Indicate whether the error handling and message buffering facility should be enabled for the session.	YES | NO	NO

Parameter	Use to	Values	Default
SOrtcache	Indicate whether to enable (YES) or disable (NO) controller caching for the Adabas Sort data set.	YES | NO	YES
SPt	Indicate whether use of Adabas triggers and stored procedures should be enabled for the session.	YES | NO	NO
SRlog	Indicate how spanned records should be logged to the protection logs.	ALL | UPD | PART	UPD
SVc	Specify the Adabas SVC number or Adabas Review hub SVC number to be used for the session.	200 - 255	249
TARgetid	Specify the unique Entire Net-Work target ID for this node.	1 - 65535	1
TCPIp	Indicate whether a direct TCP/IP link to the Adabas nucleus should be activated for this session.	YES | NO	NO
TCPUrl	Identify the universal resource locator (URL) for the direct TCP/IP link to the Adabas nucleus (when TCPIP is set to "YES").	*url*	---
TEmpcache	Indicate whether to enable (YES) or disable (NO) controller caching for the Adabas Temp data set. This parameter is valid only in z/OS environments.	YES | NO	YES
TFlush	Specify the time, in seconds, to allow for a synchronous buffer flush.	1 - 30	1
TLscmd	Specify the maximum time, in seconds, to be used to process a single Adabas S1, S2, or S4 command with complex search criteria.	1 - the setting of the ADARUN MXTSX parameter	300
TMDrq	Set the number of entries allowed in the Adabas Transaction Manager's internal request queue. (Adabas Transaction Manager)	10 - 32767	10
TMEtdata	Identify the database or databases that will store Adabas Transaction Manager's ET data. (Adabas Transaction Manager)	ATM | TARGETS	TARGETS
TMGtt	Set the time limit, in seconds, during which a global transaction can be open without being prepared. (Adabas Transaction Manager)	1 - 16777215	720
TMLog	Identify the logging option for the current execution of the Adabas Transaction Manager. (Adabas Transaction Manager)	YES | NO | NEVER	NO
TMMsgsev	Set the severity threshold for the suppression of Adabas Transaction Manager warning messages. If this parameter is set to "0", no messages are suppressed.	0 | 4 | 8	0

Parameter	Use to	Values	Default
	(Adabas Transaction Manager)		
TMRestart	Identify how restart processing of problematic transactions should be handled. (Adabas Transaction Manager)	NORMAL | FORCE | FORCEALL	NORMAL
TMSyncmgr	Indicate whether the Adabas Transaction Manager is to interact with an external transaction coordinator. (Adabas Transaction Manager)	NONE | RRMS	NONE
TMTcidpref	Define the first one or two characters (the prefix) of dynamically allocated client IDs. Up to two alphanumeric characters can be specified. (Adabas Transaction Manager)	*prefix*	TM
TNAA	Specify the maximum elapsed time, in seconds, that an access-only user may be considered active without issuing an Adabas command.	1 - 2147483647	900
TNAE	Specify the maximum elapsed time, in seconds, that an ET logic user may be considered active without issuing an Adabas command.	1 - 2147483647	900
TNAX	Specify the maximum elapsed time, in seconds, that an exclusive control user may be considered active without issuing an Adabas command.	1 - 2147483647	900
TT	Specify the maximum elapsed time, in seconds, permitted for a logical transaction issued by an ET logic user.	1 - 2147483647	900
UEX*nn*	Activate a user exit and specify the name of the user routine for the exit. The value of *nn* in the parameter name must be an integer in the range from 1 through 12, inclusive that identifies the number of the user exit. The value assigned the parameter must be a one to eight-character name of the corresponding user routine that gets control. **Note:** User exit 2 (UEX2) and user exit 12 (UEX12) are mutually exclusive.	*user-routine-name*	---
UEXSMF	Specify the name of the SMF user exit module.	*module-name*	---
UPdatecontrol	Specify whether or not to shortly delay the scheduling of update commands at the end of buffer flushes.	DELAY | NODELAY	DELAY
UTIonly	Indicate whether the session should be restricted to Adabas utilities only.	YES | NO	NO
V64bit	Indicate whether the Adabas nucleus should use virtual storage above the 2 gigabyte bar. In order for	YES | NO	NO

Parameter	Use to	Values	Default
	the nucleus to use 64-bit virtual storage, the operating system must also support 64-bit virtual storage.		
VIsta	Indicate whether support for Adabas Vista should be enabled. (Adabas Vista)	YES | NO	NO
WOrkcache	Indicate whether to enable (YES) or disable (NO) controller caching for the Adabas Work data set. This parameter is valid only in z/OS environments.	YES | NO	YES
ZIIP	Indicate whether or not to activate Adabas for zIIP.	YES | NO	NO

4 ADARUN Statement/Parameter Messages

The Adabas ADARUN statements and parameters define the nucleus operating environment. The error messages that can result from ADARUN statements and parameters are described in this section. These messages have the following format:

```
ADARUN error-nn,message-text
```

where *nn* is the message number and *message-text* describes the error. All ADARUN error messages are accompanied by a user abend 35 (abnormal end without a dump) code.

For information regarding ADARUN parameter syntax, refer to the *Adabas Operations Manual*.

Error-1	**I/O error Reading DDCARD**
Explanation	A job control (JCL/JCS) error occurred.
Action	Correct the error and rerun the job.

Error-2	**Unknown module**
Explanation	The library allocation JCL is incorrect.
Action	Correct the error and rerun the job.

Error-3	**Keyword ADARUN missing**
Explanation	The ADARUN parameter statement is missing the literal "ADARUN" at the beginning of the statement.
Action	Add the ADARUN keyword and rerun the job.

Error-5 **Invalid parameter syntax**

Explanation One of the following errors has occurred:

- An ADARUN input line was encountered without a valid parameter.
- A delimiter is missing between ADARUN parameters.
- A parameter value is missing.
- A parameter value is too long.
- The numeric value specified for the ADARUN parameter is too large.
- An invalid unit indicator has been specified for a numeric parameter.
- An invalid hexadecimal string has been specified.
- Too many values have been specified in a list of values.
- A parameter keyword is missing.

Action Correct the error and rerun the job.

Error-6 **Ambiguous keyword {ambkey}**

Explanation ADARUN detected an ambiguous keyword (*ambkey*) in its specifications.

Action Correct the error and rerun the job.

Error-7 **Unknown keyword {keyword}**

Explanation ADARUN detected the invalid keyword shown in the message (*keyword*).

Action Correct the error and rerun the job.

Error-8 **Error loading module {modname}**

Action ADARUN detected a nonzero return code from the operating system's load function.

Action Refer to any related ADAI*nn* or other messages for the specific return code value, then refer to the appropriate operating system information to determine what action to take.

Error-9 **ADARUN not called from USER program**

Explanation ADARUN was *not* called by a user program but the ADARUN PROGRAM parameter was specified with a value of "USER" or "RENTUSER".

Action Correct the JCL or control statements and rerun the job.

Error-12 **Invalid CMDQMODE = operand (above, below)**

Explanation BS2000 only. The CMDQMODE parameter specified an incorrect syntax option.

Action Job terminates. Set the correct parameter value.

Error-13 **Invalid TAPEREL = operand (NO, RELEASE, KEEP, UNLOAD, KEEPUNL)**

Explanation BS2000 only. The TAPEREL parameter specified an incorrect syntax option.

Action Job terminates. Set the correct parameter value.

Error-20 **Wrong AMODE-24 for RMODE-31**

Explanation ADARUN detected one or more loaded modules linked with RMODE={ANY | 31} while it runs in AMODE=24.

Action Check the load library and either relink modules linked with AMODE=24 to AMODE={ANY | 31}, or relink modules linked with RMODE=ANY to RMODE=24.

Error-21 **Inconsistent CLUSTER parameter**

Explanation ADARUN detected an inconsistent CLUSTER parameter setting:

- Invalid CLUSTER or CLUCACHEUNCHANGED parameter,
- CLUSTER=SYSPLEX or LOCAL, and NUCID=0,
- CLUSTER=NO (default) but NUCID is nonzero, or
- CLUCACHEUNCHANGED=YES but CLUSTER is not LOCAL.

Action Correct the error and rerun the job.

Error-22 **Inconsistent NPLOG or NCLOG parameter**

Explanation ADARUN detected an inconsistent parameter:

- Both NPLOG/NCLOG and DUALPLD/DUALCLD are specified; or
- PPLOGDEV/CLOGDEV and PLOGSIZE/CLOGSIZE are specified but NPLOG/NCLOG is not specified; or
- UEX2 together with NPLOG/NCLOG instead of UEX12 was found in the ADARUN parameters.
- The CLOGMAX or CLOGBMAX parameter setting is smaller than 368 bytes.

Action Correct the error and rerun the job.

Error-23	**Invalid value for parameter {parmname}**
Explanation	ADARUN detected an invalid or inconsistent value for the parameter listed in the message (*parmname*).
Action	Correct the error and rerun the job.

Error-25	**Version mismatch in one or more modules**
Explanation	One or more Adabas modules loaded by ADARUN have different version/release/patch-level indicators (or in some cases, version/release indicators) than ADARUN itself. The mismatching modules are listed in preceding "ADARUN Warning: Mismatching version indicators in module *xxxxxx*" messages, where *xxxxxx* is the load module name. ADARUN terminates with the Error-25 only if the Adabas SAF Security add-on product is installed.
Action	Provide a load library (or concatenation of load libraries) where all Adabas modules belong to the same Adabas version, release and patch-level, or for add-on products, the same version and release level.

Error-29	**Loaded modules do not support ENCRYPTION**
Explanation	The Adabas load library is not correct and does not fully support Adabas Encryption, Adabas Auditing or Adabas SAF Security 8.3. Either the ADAIOR/IOS modules do not support Adabas Encryption or some of the required maintenance in the nucleus and utilities is missing.
Action	Review and correct the JOBLIB/STEPLIB concatenation or combined load library, as per the installation instructions for Adabas Encryption. Ensure that all zaps required for Adabas Encryption, Adabas Auditing or Adabas SAF Security 8.3 have been applied.

Error-31	**IDTNAME does not start "ADA"**
Explanation	This is a BS2000 only error. The user has defined the IDTNAME or the ENVNAME in the SSFB2C parameter module which does not begin with "ADA". This will lead to a failure in communication between Client applications and nucleus.
Action	Correct the IDTNAME in the ADARUN parameter list so that it begins with "ADA" and restart the nucleus.

Error-32	**SWITCHNR out of range 0 - 31**
Explanation	ADARUN detected an inconsistent Adabas BS2000 parameter. The job switch number to be set when a non-zero return code occurs is out of the range of 1 to 31.
Action	Correct the error and rerun the job.

Error-33	**SUBMPSZ needs to be higher than x100000**
Explanation	ADARUN detected an inconsistent Adabas BS2000 parameter. The size of the declared subtask memory pool is too small.
Action	Correct the error and rerun the job.

Error-34	**PAMREQS must be a value > 0**
Explanation	ADARUN detected an inconsistent Adabas BS2000 parameter. The maximum number of PAM blocks sent in one PAM macro must be greater than zero.
Action	Correct the error and rerun the job.

WARNING 26	**Parameter AMODE out of service**
Explanation	BS2000 only. ADARUN statement AMODE=31 detected. This parameter has been removed from Adabas. Targets that use SSF must run in AMODE 31.
Action	The job continues. Remove AMODE= from your ADARUN statements.

WARNING 27	**Parameter IDTMODE out of service**
Explanation	BS2000 only. IDTMODE=ABOVE statement detected. This parameter has been removed from Adabas. IDTs created by SSF are allocated above the 16-megabyte line.
Action	The job continues. Remove IDTMODE= from your ADARUN statements.

WARNING 28	**Parameter NECB out of service**
Explanation	BS2000 only. NECB= statement detected. This parameter has been removed from Adabas. The posted ECB queue can no longer overflow.
Action	Job continues. Remove NECB= from your ADARUN statements.

5 Console Operator Commands

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Nucleus Operator Commands

ADAEND Command

Use the ADAEND command to terminate 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. In nucleus cluster environments, the GLOBAL option can be used to terminate the Adabas session in all active cluster nuclei.

ALOCKF Command

Use the ALOCKF command to lock a file in advance to ensure that an EXU, EXF, or UTI user will be able to obtain exclusive control of the specified file. The advance-lock prevents new transactions from using the file. Once all current users have stopped using the file, the exclusive-control user will get the lock. Until then, Adabas keeps the exclusive-control user waiting.

To remove the advance lock without running the utility, see the RALOCKF command.

This command is not available in single user mode or for a read-only nucleus. It is available in cluster and non-cluster environments.

The following key points should be noted about advance-locks on files:

1. An advance-lock can be set while a file is being used.
2. A command requesting exclusive control (UTI, EXF, or EXU) over an advance-locked file will wait in the command queue until all other users stop using the file before it starts processing the file.
3. Advance-locks are automatically removed when a user gets exclusive control over the file. However, if a file is locked (via the LOCKF, LOCKU, or LOCKX commands), the locks are not removed when a user gets exclusive control over the file. (Locks must be explicitly removed, whereas advance-locks are automatically removed.)

4. Adabas will reject an advance-lock on a file that is already locked (via the LOCKF, LOCKU, LOCKX or ALOCKF commands) but will accept a lock request on an advance-locked file.
5. To ensure you have uninterrupted exclusive control over a file in a situation where you have multiple steps to run that require uninterrupted exclusive control while all steps have been processed, use a combination of advance-locking the file (ALOCKF), stopping all users of the file (STOPF), and locking the file (LOCKU).
6. In the case of expanded files, an ALOCKF command is applied to the anchor file (representing the entire expanded file chain).
7. In a cluster environment, advance-locks are effective in all nuclei of the cluster.

Simple Example

In the following example, issuing the ALOCKF request to advance-lock file 32 ensures that file 32 will be available so the ADALOD UPDATE function can take exclusive control (via a UTI request) of the file for its processing:

```
ADADBS OPERCOM ALOCKF=32
ADALOD UPDATE FILE=32
```

Adabas processing proceeds in the following manner for these utility functions:

1. When the ADADBS OPERCOM ALOCKF request is submitted, file 32 is marked as advance-locked.
2. If there are any active users of file 32, the ADALOD UTI request cannot be granted immediately and will wait for the active users to end their transactions or sessions. Active users continue to issue commands against file 32. However, requests by new users for file 32 are rejected because of the advance-lock on the file.
3. When all active users of file 32 have ended their transactions or sessions, the ADALOD UTI request for exclusive control can be granted. Once exclusive control is established, ADALOD UPDATE processing can occur.

   As part of the successful execution of the ADALOD UTI request, the advance-lock is removed from the file. However, because ADALOD processing now has exclusive control of file 32, other users still cannot access it.

To accelerate the process and limit the wait time for the ADALOD UTI request, you can simply stop all active users of the file by force using the STOPF operator command:

```
ADADBS OPERCOM ALOCKF=32
ADADBS OPERCOM STOPF=32
ADALOD UPDATE FILE=32
```

In this case, the STOPF command will cause the nucleus to back out and stop users of file 32 before the ADALOD UTI request is granted. In addition, the advance-lock request specified by the ALOCKF command will prevent new users from accessing the file until the ADALOD UTI request for exclusive control is processed.

More Complex Example

One limitation of ALOCKF processing is that it cannot ensure that a job gets uninterrupted exclusive control if the job consists of multiple job steps in a series. Suppose an installation wants to run the following utility sequence:

```
ADAULD UNLOAD FILE=45
ADADBS REFRESH FILE=45
ADALOD UPDATE FILE=45
```

An ALOCKF request to advance-lock file 45 in this case would only work for the ADAULD UNLOAD function, because the ADAULD EXU request for exclusive control of file 45 would remove the advance-lock. If there are active users who try to issue commands against file 45, there is a chance that one of them will execute a command between the UNLOAD and REFRESH steps, or between the REFRESH and UPDATE steps. Such a user may also prevent the REFRESH or UPDATE step from obtaining exclusive control of file 45.

To ensure you have uninterrupted exclusive control over the file in this situation, use a combination of advance-locking the file (ALOCKF), stopping the file (STOPF), and locking the file (LOCKU):

```
ADADBS OPERCOM ALOCKF=45
ADADBS OPERCOM STOPF=45
ADADBS OPERCOM LOCKU=45
ADAULD UNLOAD FILE=45
ADADBS REFRESH FILE=45
ADALOD UPDATE FILE=45
ADADBS OPERCOM UNLOCKU=45
```

In this example, Adabas processing proceeds in the following manner:

1. When the ADADBS OPERCOM ALOCKF request is submitted, file 45 is marked as advance-locked.

   The ADADBS OPERCOM STOPF request causes the nucleus to back out and stop users of file 45. (This step is optional.)

   The ADADBS OPERCOM LOCKU request locks the file more permanently than the ALOCKF request since the LOCKU lock will stay in effect until it is explicitly released.
2. If there are any active users updating file 45, the ADAULD EXU request cannot be granted immediately and will wait for the update users to end their transactions or sessions. Active users may continue to issue commands against file 45. However, requests by new users for file 45 are rejected because of the advance-lock on the file.
3. When all active users of file 45 have ended their transactions or sessions, the ADAULD EXU request for exclusive control can be granted. Once exclusive control is established, ADAULD UNLOAD processing can occur.

As part of the successful execution of the ADAULD UTI request, the advance-lock is removed from the file. However, because ADAULD processing now has exclusive control of file 45, other users still cannot access it.

When ADAULD processing completes, it releases exclusive control of file 45. However, the LOCKU lock ensures that other users still cannot access it.

4. The ADADBS utility will issue a UTI request for exclusive control of file 45, which will be granted. ADADBS REFRESH processing will then occur. When it completes, ADADBS will release exclusive control of file 45. However, the LOCKU lock ensures that other users still cannot access it.
5. The ADALOD utility will issue a UTI request for exclusive control of file 45, which will be granted. ADALOD UPDATE processing will then occur. When it completes, ADALOD will release exclusive control of file 45. However, the LOCKU lock ensures that other users still cannot access it.
6. The ADADBS OPERCOM UNLOCKU request explicitly unlocks file 45, making it available for other users.

AOSLOG Command

AOSLOG={YES | NO}

Use the `AOSLOG` command to activate and deactivate logging of certain Adabas calls that modify the nucleus to DD/PRINT. These calls are issued either by ADADBS OPERCOM or Adabas Online System. Read and display calls are not logged.

ASSOSPACEWARN Command

ASSOSPACEWARN=*threshold1*[,*inc1*[,*threshold2*[,*inc2*[,*threshold3*[,*inc3*]]]]]

Use the `ASSOSPACEWARN` command to specify up to three pairs of threshold percentages and percentage change increments, expressed as percentages of the total Associator (ASSO) portion of the database. When ASSO space use reaches a specified threshold percentage, a space usage message is issued. In addition, when the ASSO space use changes by the increment specified for that threshold, additional space usage messages are issued.

Note: For the purposes of database space notifications, the space used in the Adabas database comprises all database blocks that have been assigned either to some common purpose (for

example, DSST, PPT, DLOG area) or to a file in the database. Only space listed in the free space table (FST) is not calculated as used. In particular, free space allocated for some file but not yet used is calculated as used.

The following specifications can be made in the ASSOSPACEWARN command:

Parameter	Description
threshold#	A threshold, expressed as a percentage of the total Associator portion of the database. When ASSO space use exceeds or falls below any of the thresholds set, a space usage message is issued. The default is zero (0). If zero is specified for the first threshold setting, no space messages are issued. When more than one threshold is specified, the second threshold specification must be greater than the first. Likewise, the third threshold specification (if made) must be greater than the second.
inc#	An increment percentage, expressed as a percentage of the total ASSO portion of the database. When ASSO space use changes (increases or decreases) from the associated threshold by the amount given in this increment percentage, another space usage message is issued. The default is five percent (5).

Up to three threshold-increment pairs can be specified.

ASYTVS Command

```
ASYTVS={YES | NO}
```

Use the `ASYTVS` command to activate or deactivate asynchronous flushing of buffers based on volume serial number.

AUDCONNECT Command

```
ADADBS OPERCOM AUDCONNECT = { dbid | ALL }
```

```
Force a connection attempt with all related Auditing servers or databases or to the ↩
specified Adabas database ID.
```

Use the `AUDCONNECT` command to dynamically force a connection attempt to either a specific Auditing Server or Adabas database ID or to all related Auditing Server or Adabas database IDs.

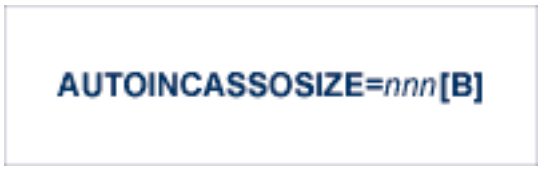
One of the parameters of the `AUDCONNECT` command must be specified. There is no default. The parameters are described in the following table:

Parameter	Forces a reconnection attempt with
ALL	All known Auditing Server or Adabas database IDs
dbid	The specified Auditing Server or Adabas database ID.

AUDITLOG Command

Use the AUDITLOG command to change the setting of the AUDITLOG ADARUN parameter from NO to CONSOLE which activates the AUDITLOG to start writing all utility, and AOS audit data to the console.

AUTOINCASSOSIZE Command



Use the AUTOINCASSOSIZE command to modify the setting of the AUTOINCASSOSIZE ADARUN parameter while the database is running. AUTOINCASSOSIZE specifies the size, in cylinders or blocks, by which the highest-numbered (last-defined) Associator (ASSO) data set will be increased by an automatic database increase process.

This parameter only has an effect if the AUTOINCASSOTHRESHOLD setting has a non-zero value. A numeric value followed by the letter B indicates the value specifies a number of blocks, which is then rounded up to the next highest amount that fills the final track or other platform-dependent minimum space allocation unit. A numeric value without the suffix B indicates the increment is in cylinders.

If an automatic database increase process is started to increase the ASSO component of the database, the last ASSO container data set will be increased by the number of cylinders or blocks specified by AUTOINCASSOSIZE. (The number of cylinders or blocks added may be less, however, if the limit set by the AUTOINCASSOTOTAL parameter is reached.)

If the last ASSO container data set cannot be increased by the specified size, but only by a lesser amount, the automatic increase process will increase the data set by the amount of space that it can get. Note that one data set can span at most 59 volumes with up to 16 extents on each volume. When these limits are reached, the database should be increased manually by adding a new container data set with the ADADBS ONLADD utility function.

When 4-byte RABNs are used, valid values for this parameter range from zero (0) to 2147483647 cylinders or from zero (0) to 2147483647B blocks. When 3-byte RABNs are used, the limits range from zero (0) to 16777215 blocks or the equivalent in cylinders. A value of "0" or "0B" means that no automatic increase will be performed for ASSO space. The default value for this parameter is zero, which functionally disables auto-increase for ASSO space.

If AUTOINCASSOSIZE is set to a small value, the automatic database increase process may be initiated multiple times and cause the container allocation to reach platform-dependent limits on extents and volumes. Once that occurs, there can be no more auto-increases until the container allocations are consolidated, which requires stopping all nuclei using the container. Alternatively, a manual increase can be used to add another container without stopping the Adabas nucleus.

AUTOINCASSOTHRESHOLD Command

Use the `AUTOINCASSOTHRESHOLD` command to modify the setting of the `AUTOINCASSOTHRESHOLD` ADARUN parameter while the database is running. AUTOINCASSOTHRESHOLD specifies the Associator space threshold at which Adabas automatically initiates a database increase process. This threshold is expressed as a percentage of used Associator (ASSO) space to total ASSO space available in the database. ASSO space is considered used if it is not listed as free in the Free Space Table (FST).

If the used ASSO space matches or exceeds the percentage defined by the specified AUTOINCAS-SOTHRESHOLD setting, Adabas automatically initiates a database increase process for ASSO space.

Note that the database increase process may take some time, the length of which is related to the size by which the database is increased (the value of the AUTOINCASSOSIZE setting). The AUTOINCASSOTHRESHOLD setting should be configured so that the increase process is given sufficient time to complete before the database fills up, assuming a reasonable space consumption rate.

Once a database increase process has been initiated, another automatic increase for ASSO space may be started only after the first process has finished and the ASSO space usage again (or still) matches or exceeds the specified threshold.

Valid values for this command are either zero (0) or integers ranging from 50 through 100. A value of zero means that no automatic increase will be performed for ASSO space. A value of 100 means that an automatic increase process will be initiated only when the ASSO space grows full (i.e., no free space is left at all). The default value is zero, which functionally disables auto-increase processes for ASSO space.

AUTOINCASSOTOTAL Command

Use the AUTOINCASSOTOTAL command to modify the setting of the AUTOINCASSOTOTAL ADARUN parameter while the database is running. AUTOINCASSOTOTAL specifies the maximum total size, in cylinders or blocks, of the entire Associator space of the database that is not to be exceeded by automatic database increase processes.

A numeric value followed by the letter B indicates the value specifies a number of blocks, which is then rounded up to the next highest amount that fills the final track or other platform-dependent minimum space allocation unit. A numeric value without a suffix B indicates the increment is in cylinders.

An automatic database increase process for ASSO space will not exceed the size specified by the AUTOINCASSOTOTAL setting. This setting can be used to limit the total amount of disk space used for the database, in order to protect the disk space remaining available for other databases and other users of the system. Note that this setting limits only automatic increases by Adabas; it does not limit increasing the database manually using the ADADBS ADD, INCREASE, ONLADD or ONLINCREASE utility functions.

AUTOINCASSOTOTAL specifies the number of cylinders or blocks beyond which automatic database increase processes will not extend the ASSO space of the database. If the AUTOINCASSOTOTAL setting is less than the current number of cylinders in the ASSO space plus the AUTOINCASSOSIZE value, an automatic increase will increase the ASSO space only by the difference between the AUTOINCASSOTOTAL value and the current size – that is, by less than the increase requested by the AUTOINCASSOSIZE setting. If AUTOINCASSOTOTAL is not greater than the current number of cylinders in ASSO, no further automatic increases will be performed for ASSO space.

When 4-byte RABNs are used, valid values for this parameter range from zero (0) to 2147483647 cylinders or from zero (0) to 2147483647B blocks. When 3-byte RABNs are used, the limits range from zero (0) to 16777215 blocks or the equivalent in cylinders. A value of "0" or "0B" means that no automatic increase will be performed for ASSO space. The default value for this parameter is zero, which functionally disables auto-increase for ASSO space.

The total size of ASSO space may be constrained to less than the AUTOINCASSOTOTAL value for either of the following reasons.

- There may not be enough storage resources to extend to the specified limit.
- When using 4-byte RABNs, a component can have at most 2147483647 blocks, and for 3-byte RABNs the limit is 16777215 blocks.

AUTOINCDATASIZE Command

Use the `AUTOINCDATASIZE` command to modify the setting of the `AUTOINCDATASIZE` ADARUN parameter while the database is running. AUTOINCDATASIZE specifies the size, in cylinders or blocks, by which the highest-numbered (last-defined) Data Storage (DATA) data set will be increased by an automatic database increase process.

This parameter only has an effect if the AUTOINCDATATHRESHOLD has a non-zero value. A numeric value followed by the letter B indicates the value specifies a number of blocks, which is then rounded up to the next highest amount that fills the final track or other platform-dependent minimum space allocation unit. A numeric value without the suffix B indicates the increment is in cylinders.

If an automatic database increase process is started to increase the DATA component of the database, the last DATA container data set will be increased by the number of cylinders or blocks specified by AUTOINCDATASIZE. (The number of cylinders or blocks added may be less, however, if the limit set by the AUTOINCDATATOTAL parameter is reached.)

If the last DATA container data set cannot be increased by the specified size, but only by a lesser amount, the automatic increase process will increase the data set by the amount of space that it can get. Note that one data set can span at most 59 volumes with up to 16 extents on each volume. When these limits are reached, the database should be increased manually by adding a new container data set with the ADADBS ONLADD utility function.

When 4-byte RABNs are used, valid values for this parameter range from zero (0) to 2147483647 cylinders or from zero (0) to 2147483647B blocks. When 3-byte RABNs are used, the limits range from zero (0) to 16777215 blocks or the equivalent in cylinders. A value of "0" or "0B" means that no automatic increase will be performed for DATA space. The default value for this parameter is zero, which functionally disables auto-increase for DATA space.

If AUTOINCDATASIZE is set to a small value, the automatic database increase process may be initiated multiple times and cause the container allocation to reach platform-dependent limits on extents and volumes. Once that occurs, there can be no more auto-increases until the container allocations are consolidated, which requires stopping all nuclei using the container. Alternatively, a manual increase can be used to add another container without stopping the Adabas nucleus.

AUTOINCDATATHRESHOLD Command

Use the AUTOINCDATATHRESHOLD command to modify the setting of the AUTOINCDATATHRESHOLD ADARUN parameter while the database is running. AUTOINCDATATHRESHOLD specifies the Data Storage space threshold at which Adabas automatically initiates a database increase process. This threshold is expressed as a percentage of used Data Storage (DATA) space to total Data Storage space available in the database. DATA space is considered used if it is not listed as free in the Free Space Table (FST).

If the used Data Storage space matches or exceeds the percentage defined by the specified AUTOINCDATATHRESHOLD setting, Adabas automatically initiates a database increase process for DATA space.

Note that the database increase process may take some time, the length of which is related to the size by which the database is increased (the value of the AUTOINCDATASIZE setting). The AUTOINCDATATHRESHOLD setting should be configured so that the increase process is given sufficient time to complete before the database fills up, assuming a reasonable space consumption rate.

Once a database increase process has been initiated, another automatic increase for DATA space may be started only after the first process has finished and the DATA space usage again (or still) matches or exceeds the specified threshold.

Valid values for this command are either zero (0) or integers ranging from 50 through 100. A value of zero means that no automatic increase will be performed for DATA space. A value of 100 means that an automatic increase process will be initiated only when the DATA space grows full (i.e., no free space is left at all). The default value is zero, which functionally disables auto-increase processes for DATA space.

AUTOINCDATATOTAL Command

Use the AUTOINCDATATOTAL command to modify the setting of the AUTOINCDATATOTAL ADARUN parameter while the database is running. AUTOINCDATATOTAL specifies the maximum total

size, in cylinders or blocks, of the entire Data Storage space of the database that is not to be exceeded by automatic database increase processes.

A numeric value followed by the letter B indicates the value specifies a number of blocks, which is then rounded up to the next highest amount that fills the final track or other platform-dependent minimum space allocation unit. A numeric value without a suffix B indicates the increment is in cylinders.

An automatic database increase process for DATA space will not exceed the size specified by the AUTOINCDATATOTAL setting. This setting can be used to limit the total amount of disk space used for the database, in order to protect the disk space remaining available for other databases and other users of the system. Note that this setting limits only automatic increases by Adabas; it does not limit increasing the database manually using the ADADBS ADD, INCREASE, ONLADD or ONLINCREASE utility functions.

AUTOINCDATATOTAL specifies the number of cylinders or blocks beyond which automatic database increase processes will not extend the DATA space of the database. If AUTOINCDATATOTAL setting is less than the current DATA size plus the AUTOINCDATASIZE value, an automatic increase will increase the DATA space only by the difference between the AUTOINCDATATOTAL value and the current size – that is, by less than the increase requested by the AUTOINCDATASIZE setting. If the AUTOINCDATATOTAL setting is not greater than the current DATA size, no further automatic increases will be performed for DATA space.

When 4-byte RABNs are used, valid values for this parameter range from from zero (0) to 2147483647 blocks or the equivalent in cylinders. When 3-byte RABNs are used, the limits range from zero (0) to 16777215 blocks or the equivalent in cylinders. A value of "0" or "0B" means that no automatic increase will be performed for DATA space. The default value for this parameter is zero, which functionally disables auto-increase for DATA space.

The total size of DATA space may be constrained to less than the AUTOINCDATATOTAL value for either of the following reasons.

- There may not be enough storage resources to extend to the specified limit.
- When using 4-byte RABNs, a component can have at most 2147483647 blocks, and for 3-byte RABNs the limit is 16777215 blocks.

CANCEL Command

Use the `CANCEL` command to cancel the Adabas session immediately. All command processing is immediately suspended. A pending autorestart will be in effect which in turn will cause the autorestart routine to be executed during the initialization of the next Adabas session. In nucleus

cluster environments, the GLOBAL option can be used to cancel the Adabas session in all active cluster nuclei.

CLOGMRG Command

```
CLOGMRG={YES | NO}
```

Use the `CLOGMRG` command to dynamically modify the setting of the ADARUN CLOGMRG parameter.

The `CLOGMRG` command is only valid in cluster environments. It is global by definition and affects all nuclei in the cluster.

CLUFREEUSER Command

```
CLUFREEUSER=[,TNA= max-time ][,{UID | UIDPRFX} = userid ][,FORCE][,GLOBAL]
```

Note: The `CLUFREEUSER` command is only valid in cluster environments. It can be issued against the local nucleus only or, with the GLOBAL option, against all active and inactive nuclei in the cluster.

Use the `CLUFREEUSER` command to delete leftover cluster user table elements (UTEs or PLXUSERs) in common storage that are no longer associated with user queue elements (UQEs) in a nucleus.

TNA — TNA specifies a decimal number specifying the timeout value in seconds (*max-time*). PLXUSERs that are not used during the time specified may be deleted if other conditions are fulfilled. If TNA= is not specified, PLXUSERs may be deleted without regard to their recent use.

UID — UID specifies a character string or hexadecimal byte string format user ID (*userid*) as follows:

cccccccc	where the argument is 1-8 letters, digits, or embedded '-' signs without surrounding apostrophes.
'*cccccccc*'	where the argument is 1-8 characters with surrounding apostrophes.
X'*xxxxxxxxxxxxxxxx*'	where the argument is an even number of 2-16 hexadecimal digits enclosed by X' '.

A character string must be enclosed in apostrophes if it contains characters other than letter, digits, or embedded '-' signs. If a specified character string is less than eight characters long, it is implicitly padded with blanks. If a specified hexadecimal string is shorter than 16 hexadecimal

digits, it is implicitly padded with binary zeros. If the last eight bytes of a user's 28-byte communication ID match a specific user ID or user ID prefix (UIDPRFX parameter), that user's PLXUSER may be deleted if other conditions are fulfilled. If UID is not specified, PLXUSERs may be deleted regardless of their user IDs. "UID" may be abbreviated to "U".

UID and UIDPRFX are mutually exclusive; one or the other, but not both, can be specified.

UIDPRFX UIDPRFX accepts the same operands as UID. It operates in the same manner as UID, except that the operand is considered a prefix and there is no implicit padding. If the operand matches the initial bytes of the last eight bytes of the 28-byte communication ID, that PLXUSER may be deleted if other conditions are fulfilled. "UIDPRFX" may be abbreviated to "UP".

UID and UIDPRFX are mutually exclusive; one or the other, but not both, can be specified.

FORCE FORCE indicates that leftover PLXUSERs are to be deleted even if the users are due a response code 9 (ADARSP009), subcode 20. If FORCE is not specified, such PLXUSERs are not deleted. Before using the FORCE parameter, ensure that the users owning the PLXUSERs to be deleted will not expect any of their transactions to remain open.

GLOBAL GLOBAL indicates that leftover PLXUSERs throughout the Adabas cluster are to be deleted if they are no longer associated with UQEs and are eligible according to the other specified parameters. Additionally and subject to the other rules, leftover PLXUSERs are deleted if their assigned nuclei have terminated since their last use. If GLOBAL is not specified, only PLXUSERs assigned to the local nucleus and used since the nucleus start are eligible for deletion.

CT Command

Use the `CT` command to dynamically override the ADARUN `CT` parameter value; that is, the maximum number of seconds that can elapse from the time an Adabas command has been completed until the results are returned to the user through interregion communication (which depends on the particular operating system being used). The minimum setting is 1; the maximum is 16777215.

In nucleus cluster environments, the `CT` command is global by definition and affects all nuclei in the cluster.

DATASPACEWARN Command

DATASPACEWARN=*threshold1*[,*inc1*[,*threshold2*[,*inc2*[,*threshold3*[,*inc3*]]]]]

Use the DATASPACEWARN command to specify up to three pairs of threshold percentages and percentage change increments, expressed as percentages of the total Data Storage (DATA) portion of the database. When Data Storage space use reaches a specified threshold percentage, a space usage message is issued. In addition, when the Data Storage space use changes by the increment specified for that threshold, additional space usage messages are issued.

Note: For the purposes of database space notifications, the space used in the Adabas database comprises all database blocks that have been assigned either to some common purpose (for example, DSST, PPT, DLOG area) or to a file in the database. Only space listed in the free space table (FST) is not calculated as used. In particular, free space allocated for some file but not yet used is calculated as used.

The following specifications can be made in the DATASPACEWARN command:

Parameter	Description
threshold#	A threshold, expressed as a percentage of the total Data Storage (DATA) portion of the database. When DATA space use exceeds or falls below any of the thresholds set, a space usage message is issued. The default is zero (0). If zero is specified for the first threshold setting, no space messages are issued. When more than one threshold is specified, the second threshold specification must be greater than the first. Likewise, the third threshold specification (if made) must be greater than the second.
inc#	An increment percentage, expressed as a percentage of the total DATA portion of the database. When DATA space use changes (increases or decreases) from the associated threshold by the amount given in this increment percentage, another space usage message is issued. The default is five percent (5).

Up to three threshold-increment pairs can be specified.

DAUQ Command

Use the DAUQ command to display the user queue elements of those users who have executed at least one Adabas command within the last 15 minutes. Up to 100 user queue elements will be displayed.

DCMDSTAT Command

Use the DCMDSTAT command to display statistics about the number of commands per command type. Message ADAN1C is issued to display the statistics.

DCQ Command

Use the DCQ command to display all posted command queue elements (CQEs). The DCQ command displays each CQE's user ID, job name, and buffer length.

DDIB Command

Use the DDIB command to display the data integrity block (DIB). This block contains entries indicating which Adabas utilities are active and the resources being used by each utility.

DDSF Command

Use the DDSF command to display Adabas Delta Save Facility status. The DDSF command is only available if the Adabas nucleus is run with the parameter ADARUN DSF=YES.

DELCQ Command

Use the DELCQ command to explicitly request that the command queue be reviewed for unprocessed commands that have been waiting in the command queue for a specified period of time (or longer).

The DELCQ command can be issued any time during a nucleus session; it is not limited to instances when an online recovery process is ongoing. A one-time pass is made through the command queue once the DELCQ command is issued. Only user commands for which processing has not yet been started may be returned.

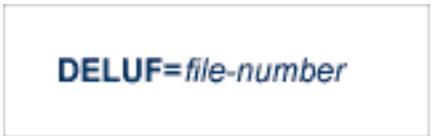
During these command queue reviews, any commands from the environments identified by the DELCQ command, with the job name identified in the command, and with wait times that match or exceed the timeout time specified by the DELCQ command will be returned to the user with response code 22 (ADARSP022), subcode 55. When a command in the command queue is returned to the user, no related information is written to the CLOG data set.

The following table describes the substitutions in the syntax of the DELCQ command.

Parameter	Required?	Description . . .	Default
seconds	Yes	Specify the timeout time, in seconds, for a command in the command queue. When the wait time for a command in the command queue reaches or exceeds this timeout value, the command is returned to the issuing user with response code 22 (ADARSP022), subcode 55. Valid values range from 1 through 86400 seconds. There is no default.	—
E	No	Specify ALL (to return commands in the command queue from all users) or CICS (to return commands only from CICS sessions).	ALL
J	No	Specify a job name to return only commands in the command queue with that job name. The default value is blanks; all commands exceeding the timeout limit coming from any job are returned.	(blanks)

Parameter	Required?	Description . . .	Default
GLOBAL	No	This parameter applies only to cluster nuclei. When specified, the timeout value specified by the DELCQ command applies to all active nuclei in the cluster. The default is not to use the GLOBAL parameter; the timeout value then applies only to the command queue for the current nucleus and is ignored by any other nuclei in the cluster.	—

DELUF Command



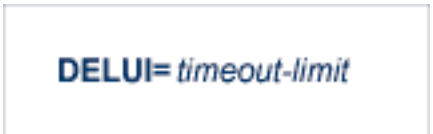
Use the DELUF command to delete all users who are using the specified file. Any open transactions of the deleted users are backed out.

This command does not delete EXF or UTI users.

The DELUF command corresponds to the ADADBS OPERCOM STOPF=*file-number*,PURGE function.

Caution: If Adabas is running with ADARUN OPENRQ=NO (specifying that users are not required to issue an OP as the first command of the session), run the DELUF command only if you are certain that the users to be deleted are no longer active. If a user with an open transaction is deleted, but then returns (by sending a command), no indication is given about the transaction backout. If the user continues the transaction, logical inconsistencies in the database could occur.

DELUI Command



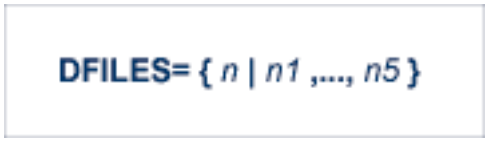
Use the DELUI command to delete all users who have not executed a command during the specified time interval (in seconds). Any open transactions of the deleted users are backed out.

This command does not delete EXF or UTI users.

The DELUI command corresponds to the ADADBS OPERCOM STOPI=*time*,PURGE function.

Caution: If Adabas is running with ADARUN OPENRQ=NO (specifying that users are not required to issue an OP as the first command of the session), run the DELUI command only if you are certain that the users to be deleted are no longer active. If a user with an open transaction is deleted, but then returns (by sending a command), no indication is given about the transaction backout. If the user continues the transaction, logical inconsistencies in the database could occur.

DFILES Command



Use the `DFILES` command to display the number of users currently accessing, updating, or controlling either a specific file (*n*) or a series of individual files, specified in a list (*n1*, . . . , *n5*). A maximum of five files can be specified in the list. Users are displayed by job name and Adabas-assigned user ID, and listed by file. Only the first 5 users are displayed. If there are more than five users, the number of remaining users is also shown.

DFILESTAT Command

Use the `DFILESTAT` command to display statistics for the number of commands by file. Message ADAN1B is issued to display the statistics.

DFILUSE Command

Use the `DFILUSE` command to display the number of total commands processed so far for the specified file during the current session. The count is displayed in the nucleus message ADAN33.

DHQ Command

Use the `DHQ` command to display up to five hold queue elements (HQEs) and up to five users of each element.

DHQA Command

Use the `DHQA` command to display up to 100 hold queue elements and up to 10 users of each element.

DLOCKF Command

Use the `DLOCKF` command to display the locked files. The type of lock is shown in the output. With the exception of advanced file locks, the type of lock appears in parentheses after the file number in console message ADAN30. Possible types are described in the following table:

Type	Description
F	The file was locked by LOCKF.
U	The file was locked by LOCKU.
X	The file was locked by LOCKX.

Files locked by ALOCKF (advanced file locks) are identified with the "A-Files=*nn*" version of the ADAN30 console message.

DMEMTB Command

The DMEMTB command can be issued against Adabas cluster nuclei to display the member state table, which provides information about all of the active nuclei in an Adabas cluster. The information produced by this command may be used by Software AG technical support.

The output produced by the DMEMTB command includes a third flag that indicates whether a system- or message-level XCF status monitoring exception has been encountered and whether a message was issued for the exception.

Sample Output

```
ADAX61 00226 2009-06-24 16:53:26 Member Status Table
ADAX61 00226 2009-06-24 16:53:26 Other members:        1
ADAX61 00226 2009-06-24 16:53:26   This system:        1
ADAX61 00226 2009-06-24 16:53:26
ADAX61 00226 2009-06-24 16:53:26         NUCID:    2,261
ADAX61 00226 2009-06-24 16:53:26   Internal ID:        2
ADAX61 00226 2009-06-24 16:53:26        System: DA2F
ADAX61 00226 2009-06-24 16:53:26      Job Name: USACHPD1
ADAX61 00226 2009-06-24 16:53:26   Flags 1/2/3: 11/00/00
ADAX61 00226 2009-06-24 16:53:26
ADAX61 00226 2009-06-24 16:53:26         NUCID:    2,262
ADAX61 00226 2009-06-24 16:53:26   Internal ID:        3
ADAX61 00226 2009-06-24 16:53:26        System: DA2F
ADAX61 00226 2009-06-24 16:53:26      Job Name: USACHPD2
ADAX61 00226 2009-06-24 16:53:26   Flags 1/2/3: D7/00/00
ADAN41 00226 2009-06-24 16:53:26 Function completed
```

Flags 1, 2, and 3 in this report are hexadecimal values that provide the following information about each nucleus:

Flag	Provides
1	The cluster member service summary, as a combination of one or more of the following values: ■ X'80' – All services are active ■ X'40' – Work data set is needed for recovery ■ X'10' – Accepting and processing intracluster commands ■ X'04' – Cache services are available ■ X'02' – Lock services are available ■ X'01' – Messaging services are available

Flag	Provides
	For example, a value of 97 for Flag 1 indicates that all services are active (X'80'), the nucleus is accepting and processing intracluster commands (X'10'), and cache (X'04'), lock (X'02') and messaging (X'01') services are all available (80+10+4+2+1=97).
2	The cluster member failure status, as a combination of one or more of the following values: ■ X'80' – All services are down ■ X'40' – Canceled by this nucleus ■ X'10' – Abnormal termination of intracluster command processing occurred ■ X'04' – Abnormal exit from cache occurred ■ X'02' – Abnormal exit from lock occurred ■ X'01' – Abnormal exit from the XCF group (messaging) occurred
3	The cluster XCF status monitoring summary, as a combination of one or more of the following values: ■ X'80' – A system-level XCF status monitoring exception occurred. ■ X'40' – A member-level XCF status monitoring exception occurred. ■ X'02' – A warning message was issued for the system-level XCF status monitoring exception. ■ X'01' – A warning message was issued for the member-level XCF status monitoring exception. For example, a value of 41 for Flag 3 indicates that a member-level XCF status monitoring exception occurred (X'40') and that a warning message (X'01') was issued for it (40+1=41).

DNC Command

Use the `DNC` command to display the number of posted command queue elements waiting to be selected.

DNFV Command

Use the `DNFV` command to display information about current file use.

This command provides information about the files in use at a particular point in time. It also indicates which other nucleus has exclusive file control if, for example, a user program receives a response 148 (ADARSP148), subcode 15.

Here is some sample output:

```
ADAI29 OPER CMD: DNFV

FNR=00008  A=Y U=Y ID=      CA=00000   CU=00001
```

where;

FNR=*nnnnn*	is the file number
A={Y | N}	(yes or no) indicates whether the file is used for access (read and/or search)
U={Y | N}	(yes or no) indicates whether the file is used for update. Use for update includes use for access.
ID=*nucid*	is the ID of the nucleus that owns the file lock, if the file is locked.
CA=*nnnnn*	is the number of users on this nucleus who are currently accessing this file.
CU=*nnnnn*	is the number of users on this nucleus who are currently updating this file.

DNH Command

Use the `DNH` command to display the number of ISNs currently in the hold queue.

DNU Command

Use the `DNU` command to display the number of current users.

DONLSTAT Command

Use the DONLSTAT command to display the status of each active reorder, invert online, or Event Replicator for Adabas initial-state process together with the process ID.

DPARM Command

Use the DPARM command to display the Adabas session parameters currently in effect. Here is an example:

```
23:17:08 ADAI29 OPER CMD: DPARM
23:17:08 ADAN16 61934 2016-02-24 23:17:06 AOSLOG=YES
23:17:08 ADAN16 61934 2016-02-24 23:17:06 ARNWORKBUFFERS=270
23:17:08 ADAN16 61934 2016-02-24 23:17:06 ASSOSPACEWARN=50,10
23:17:08 ADAN16 61934 2016-02-24 23:17:06 ASYTVS=YES
23:17:08 ADAN16 61934 2016-02-24 23:17:06 AUDITLOG=CONSOLE
23:17:08 ADAN16 61934 2016-02-24 23:17:06 AUTOCQENV=ALL
23:17:08 ADAN16 61934 2016-02-24 23:17:06 AUTOCQTIME=60
23:17:08 ADAN16 61934 2016-02-24 23:17:06 AUTOINCASSOSIZE=500
23:17:08 ADAN16 61934 2016-02-24 23:17:06 AUTOINCASSOTHRESHOLD=80
23:17:08 ADAN16 61934 2016-02-24 23:17:06 AUTOINCASSOTOTAL=10,000
23:17:08 ADAN16 61934 2016-02-24 23:17:06 AUTOINCDATASIZE=1000
23:17:08 ADAN16 61934 2016-02-24 23:17:06 AUTOINCDATATHRESHOLD=80
23:17:08 ADAN16 61934 2016-02-24 23:17:06 AUTOINCDATATOTAL=20,000
23:17:08 ADAN16 61934 2016-02-24 23:17:06 CT=900
23:17:08 ADAN16 61934 2016-02-24 23:17:06 DATASPACEWARN=60,5
23:17:08 ADAN16 61934 2016-02-24 23:17:06 FMXIO=1
23:17:08 ADAN16 61934 2016-02-24 23:17:06 INDEXCROSSCHECK=YES
23:17:08 ADAN16 61934 2016-02-24 23:17:06 INDEXUPDATE=ADVANCED
23:17:08 ADAN16 61934 2016-02-24 23:17:06 INTNAS=3,600
23:17:08 ADAN16 61934 2016-02-24 23:17:06 LARGEPAGE=NO
23:17:08 ADAN16 61934 2016-02-24 23:17:06 LBP= 104,860,416
23:17:08 ADAN16 61934 2016-02-24 23:17:06 LCP=10,000
23:17:08 ADAN16 61934 2016-02-24 23:17:06 LDEUQP=5,000
23:17:08 ADAN16 61934 2016-02-24 23:17:06 LFIOP=1
23:17:08 ADAN16 61934 2016-02-24 23:17:06 LFP=10,240,000
23:17:08 ADAN16 61934 2016-02-24 23:17:06 LI=819,200
23:17:08 ADAN16 61934 2016-02-24 23:17:06 LOGCB=YES
23:17:08 ADAN16 61934 2016-02-24 23:17:06 LOGFB=NO
```

```
23:17:08 ADAN16 61934 2016-02-24 23:17:06 LOGGING=NO
23:17:08 ADAN16 61934 2016-02-24 23:17:06 LOGIB=YES
23:17:08 ADAN16 61934 2016-02-24 23:17:06 LOGIO=NO
23:17:08 ADAN16 61934 2016-02-24 23:17:06 LOGMB=NO
23:17:08 ADAN16 61934 2016-02-24 23:17:06 LOGRB=YES
23:17:08 ADAN16 61934 2016-02-24 23:17:06 LOGSB=NO
23:17:08 ADAN16 61934 2016-02-24 23:17:06 LOGUX=YES
23:17:08 ADAN16 61934 2016-02-24 23:17:06 LOGVB=NO
23:17:08 ADAN16 61934 2016-02-24 23:17:06 LOGVOLIO=NO
23:17:08 ADAN16 61934 2016-02-24 23:17:06 LOGWARN=30
23:17:08 ADAN16 61934 2016-02-24 23:17:06 LP=4,000
23:17:08 ADAN16 61934 2016-02-24 23:17:06 LQ=220,000
23:17:08 ADAN16 61934 2016-02-24 23:17:06 LRPL=104,857,600
23:17:08 ADAN16 61934 2016-02-24 23:17:06 LS=29,952
23:17:08 ADAN16 61934 2016-02-24 23:17:06 LU=64,000
23:17:08 ADAN16 61934 2016-02-24 23:17:06 LWP=1,200,000
23:17:08 ADAN16 61934 2016-02-24 23:17:06 MXTNA=7,200
23:17:08 ADAN16 61934 2016-02-24 23:17:06 MXTSX=7,200
23:17:08 ADAN16 61934 2016-02-24 23:17:06 MXTT=900
23:17:08 ADAN16 61934 2016-02-24 23:17:06 NC=2,000
23:17:08 ADAN16 61934 2016-02-24 23:17:06 NH=5,000
23:17:08 ADAN16 61934 2016-02-24 23:17:06 NISNHQ=1,000
23:17:08 ADAN16 61934 2016-02-24 23:17:06 NONDES=YES
23:17:08 ADAN16 61934 2016-02-24 23:17:06 NPLOGBUFFERS=9
23:17:08 ADAN16 61934 2016-02-24 23:17:06 NQCID=10
23:17:08 ADAN16 61934 2016-02-24 23:17:06 NSISN=51
23:17:08 ADAN16 61934 2016-02-24 23:17:06 NT=30
23:17:08 ADAN16 61934 2016-02-24 23:17:06 NU=10,000
23:17:08 ADAN16 61934 2016-02-24 23:17:06 NWORK1BUFFERS=9
23:17:08 ADAN16 61934 2016-02-24 23:17:06 READONLY=NO
23:17:08 ADAN16 61934 2016-02-24 23:17:06 REFSTPRT=YES
23:17:08 ADAN16 61934 2016-02-24 23:17:06 REVIEW=NO
23:17:08 ADAN16 61934 2016-02-24 23:17:06 RIAFTERUPDATE=NO
23:17:08 ADAN16 61934 2016-02-24 23:17:06 SECUID=WARN
23:17:08 ADAN16 61934 2016-02-24 23:17:06 SMF=YES
23:17:08 ADAN16 61934 2016-02-24 23:17:06 SMFDETAIL=NONE
23:17:08 ADAN16 61934 2016-02-24 23:17:06 SMFINTERVAL=5
23:17:08 ADAN16 61934 2016-02-24 23:17:06 SMFRECNO=255
23:17:08 ADAN16 61934 2016-02-24 23:17:06 SMFSUBSYS=CURR
23:17:08 ADAN16 61934 2016-02-24 23:17:06 SMF89=NO
23:17:08 ADAN16 61934 2016-02-24 23:17:06 TLSCMD=900
23:17:08 ADAN16 61934 2016-02-24 23:17:06 TNAA=3,600
23:17:08 ADAN16 61934 2016-02-24 23:17:06 TNAE=3,600
23:17:08 ADAN16 61934 2016-02-24 23:17:06 TNAX=300
23:17:08 ADAN16 61934 2016-02-24 23:17:06 TT=300
23:17:08 ADAN16 61934 2016-02-24 23:17:06 UPDATECONTROL=NODELAY
23:17:08 ADAN16 61934 2016-02-24 23:17:06 UTIONLY=NO
23:17:08 ADAN16 61934 2016-02-24 23:17:06 V64BIT=YES
23:17:08 ADAN41 61934 2016-02-24 23:17:06 FUNCTION COMPLETED
```

Additional Adabas add-on products and nucleus components may display more parameters than are shown in this sample. For example, the DPARM command includes settings for the ADARUN

parameters related to Adabas Cluster Services and Adabas Parallel Services alert and timeout statistics.

DPPT Command

Use the `DPPT` command to display the parallel participant table (PPT) block for a nucleus.

This command produces internal information for use by Software AG technical support.

Sample Output

```
ADAI29 Oper cmd: DPPT
ADAN24 00199 2009-01-27 22:31:35 Display PPT RABNs 00000083 to 000000A2
ADAN24 00199 2009-01-27 22:31:35
ADAN24 00199 2009-01-27 22:31:35          PPT RABN: 00000083
ADAN24 00199 2009-01-27 22:31:35 Number of entries: 05
ADAN24 00199 2009-01-27 22:31:35 Nucleus indicator: E2
ADAN24 00199 2009-01-27 22:31:35             NUCID: 0000
ADAN24 00199 2009-01-27 22:31:35    Session number: 0005
ADAN24 00199 2009-01-27 22:31:35   Last PLOG block: 00000000
ADAN24 00199 2009-01-27 22:31:35    PLOG block ind: 00
ADAN24 00199 2009-01-27 22:31:35  PPT Entry length: 0023
ADAN24 00199 2009-01-27 22:31:35          Entry ID: E6
ADAN24 00199 2009-01-27 22:31:35 Dataset=/SAGUID/PLX2/V7/WORKR1/
ADAN24 00199 2009-01-27 22:31:35  PPT Entry length: 0023
ADAN24 00199 2009-01-27 22:31:35          Entry ID: 61
ADAN24 00199 2009-01-27 22:31:35 Dataset=/ SAGUID /PLX2/V7/PLOGR1/
ADAN24 00199 2009-01-27 22:31:35  PPT Entry length: 0023
ADAN24 00199 2009-01-27 22:31:35          Entry ID: 62
ADAN24 00199 2009-01-27 22:31:35 Dataset=/ SAGUID /PLX2/V7/PLOGR2/
ADAN24 00199 2009-01-27 22:31:35  PPT Entry length: 0023
ADAN24 00199 2009-01-27 22:31:35          Entry ID: 41
ADAN24 00199 2009-01-27 22:31:35 Dataset=/ SAGUID /PLX2/V7/CLOGR1/
ADAN24 00199 2009-01-27 22:31:35  PPT Entry length: 0023
ADAN24 00199 2009-01-27 22:31:35          Entry ID: 42
ADAN24 00199 2009-01-27 22:31:35 Dataset=/ SAGUID /PLX2/V7/CLOGR2/
ADAN41 00199 2009-01-27 22:31:35 Function completed    ↩
```

DRES Command

Use the `DRES` command to display the allocated pool space and the highest use level (high water mark) reached so far during the current session by record count and by percent for the following resources:

- attached buffers (AB)
- command queue (CQ)
- format pool (FP)
- hold queue (HQ)
- pool for the table of ISNs (TBI)
- pool for the table of sequential commands (TBQ or TBLES)
- user queue (UQ)
- unique descriptor pool (DUQPOOL)
- security pool
- user queue file list pool
- work pool (WP)
- pool for global transaction IDs (XIDs; nonzero only with Adabas Transaction Manager)
- cluster block update redo pool (nonzero only for a cluster nucleus with ADARUN LRDP greater than zero)
- Work part 1 area (WKP1)

  Note: The maximum pool value of Work part 1 is derived from the LP parameter. It corresponds to the maximum number of blocks a transaction can spend on Work Part 1 before Adabas decides to back it out.

- Work part 2 area (WKP2)
- Work part 3 area (WKP3)

The actual values are displayed in nucleus message ADAN28, described in the *Adabas Messages and Codes Manual*.

DRPLSTAT Command

Use this command to display the replication-related statistics for an Adabas database (with replication turned on) or for an Event Replicator Server.

When issued against an Adabas database (with replication turned on), the statistics listed include:

- The total number of replication transactions completely processed.
- The current number of pending replicated transactions (transactions that have been committed, but not yet processed)
- The current number of incomplete transactions that will be replicated (but are not yet committed).

When issued against an Event Replicator Server, the statistics related to destinations, global values, and subscriptions in the database are listed. Replay Utility (ADARPL) statistics are also included.

The syntax for DRPLSTAT is:

DRPLSTAT [, {D = *destname* **| GLOBALS | S =** *sname* **| TOKENS}]**

The DRPLSTAT parameters are *always* optional and should be used only when the command is issued against an Event Replicator Server; the parameters are not valid when DRPLSTAT is issued for an Adabas database.

Note: Errors will occur if you attempt to run DRPLSTAT for an Adabas database using any of the parameters.

DRPLSTAT parameters are described in the following table. If you do not specify any of these parameters, replication-related statistics about all destinations, global values, and subscriptions in the Event Replicator Server are displayed.

Parameter	Displays replication-related statistics for:
D=*destname*	The specified destination (*destname*).
GLOBALS	All global values only.
S=*sname*	The specified subscription (*sname*).
TOKENS	ADARPL or ADALOD tokens. When a synchronized or replay-only request is submitted, a token is created in the Event Replicator Server nucleus. The TOKENS option of the DRPLSTAT facility allows you to view the details of the token, including the DBID, subscription, destination, start date, start time, end date, and end time in the token.

DSPACE Command

Use the DSPACE command to display space defined and used in ASSO and DATA. Message ADANS5 is issued with usage statistics.

DSTAT Command

Use the DSTAT command to display statistics about the current Adabas nucleus status.

When this command is issued against a running Event Replicator ADARPL job, the Replay Utility (ADARPL) statistics are displayed.

Note: After issuing a REFRESHSTATS, DSTAT displays the refreshed statistics.

DTARG Command

Use the `DTARG` command to display the system image currently servicing commands routed using the Entire Net-Work DBID target. This command can be issued against Adabas cluster nuclei.

The Entire Net-Work DBID target is used to route commands from users on remote systems with no active PLXCB. Such systems may be part of the z/OS sysplex or other Entire Net-Work nodes outside the sysplex.

DTH Command

Use the `DTH` command to display thread status.

DUQ Command

Use the `DUQ` command to display up to five active and inactive user queue elements.

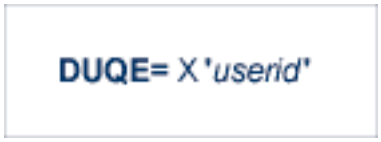
Note: The ETID field has been enhanced to display the ETID in hex if it contains non-displayable characters, otherwise it will be displayed in character format. Trailing spaces are removed.

DUQA Command

Use the `DUQA` command to display up to 100 user queue elements.

Note: The ETID field has been enhanced to display the ETID in hex if it contains non-displayable characters, otherwise it will be displayed in character format. Trailing spaces are removed.

DUQE Command



Use the `DUQE` command to display the user queue element for the specified Adabas-assigned user ID. The user ID must be entered in hexadecimal format as follows:

```
DUQE=X'A3C1F2'
```

Do not enter a job name in place of the user ID.

Note: The ETID field has been enhanced to display the ETID in hex if it contains non-displayable characters, otherwise it will be displayed in character format. Trailing spaces are removed.

DUUQE Command

Use the `DUUQE` command to display utility user queue elements. Up to 100 user queue elements will be displayed.

Note: The ETID field has been enhanced to display the ETID in hex if it contains non-displayable characters, otherwise it will be displayed in character format. Trailing spaces are removed.

DVOLIO Command

Use the `DVOLIO` command to display ASSO and DATA I/Os by volume serial (VOLSER) number. The number of reads and writes to each volume is displayed. Message ADAN1A is issued with these statistics.

In nucleus cluster environments, the NUCID=0 option can be used to display information for all active cluster nuclei. Information is displayed for each nucleus, one after the other.

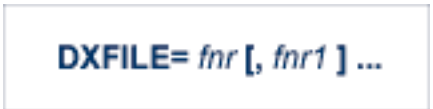
DXCACHE Command

Issue the `DXCACHE` command against cluster nuclei to display the primary cache-related statistics. Statistics are displayed in messages on the console. The kinds of statistics displayed are described in *External Cache Statistics (Cluster Nucleus Only)*, in the *Adabas Cluster Services Operations Guide* or in *Global Cache Statistics (Cluster Nucleus Only)* in the *Adabas Parallel Services Operations Guide*.

The full set of statistics shown in this output is displayed only for users who have the selectable unit Adabas Online System (AOS) installed.

If you have installed only the demo version of AOS delivered with Adabas, only the statistics in the sections *Totals*, *Data Storage*, and *Normal Index* are displayed using this command.

DXFILE Command



Issue the `DXFILE` command against cluster nuclei to display cache-related statistics for one to five files.

Statistics are displayed in messages on the console. The kinds of statistics displayed are described in *External Cache Statistics (Cluster Nucleus Only)*, in the *Adabas Cluster Services Operations Guide* or in *Global Cache Statistics (Cluster Nucleus Only)*, in the *Adabas Parallel Services Operations Guide*.

DXLOCK Command

Issue the DXLOCK command against cluster nuclei to display lock-related statistics. Statistics are displayed in messages on the console. The kinds of statistics displayed are described in *External Lock Statistics (Cluster Nucleus Only)*, in the *Adabas Cluster Services Operations Guide* or in *Global Lock Statistics (Cluster Nucleus Only)*, in the *Adabas Parallel Services Operations Guide*.

DXMSG Command

The DXMSG command can be used to display the messaging performance statistics available for Adabas Cluster Services or Adabas Parallel Services. Statistics are displayed in messages on the console. The kinds of statistics displayed are described in *Messaging Statistics*, in the *Adabas Cluster Services Operations Guide* or *Adabas Parallel Services Operations Guide*.

The statistics produced by the DXMSG command can be used to determine the impact of messaging on system performance and to determine how to set the ADARUN MXMSG parameter.

DXSTAT Command

Use the DXSTAT command against cluster nuclei to display all cache- and lock-related statistics as well as I/O statistics for WORK datasets in the cluster. Statistics are displayed in messages on the console. The kinds of statistics displayed are described in *External Cache Statistics (Cluster Nucleus Only)*, *External Lock Statistics (Cluster Nucleus Only)* and *WORK Data Set I/O Statistics (Cluster Nucleus Only)*, in the *Adabas Cluster Services Operations Guide* and in *Global Cache Statistics (Cluster Nucleus Only)*, *Global Lock Statistics (Cluster Nucleus Only)* and *WORK Data Set I/O Statistics (Cluster Nucleus Only)*, in the *Adabas Parallel Services Operations Guide*.

The full set of external cache statistics shown in this output is displayed only for users who have the selectable unit Adabas Online System (AOS) installed.

If you have installed only the demo version of AOS delivered with Adabas, only the external cache statistics in the sections *Totals*, *Data Storage*, and *Normal Index* are displayed using this command. All file cache statistics for files and all external lock statistics are displayed.

FEOFCL Command

Use the FEOFCL command to close the current dual or multiple command log and switch to another command log. This command is valid only if dual or multiple command logging is in effect.

In nucleus cluster environments, the GLOBAL option can be used to close and switch dual or multiple command logs in all active cluster nuclei.

FEOFPL Command

Use the FEOFPL command to close the current dual or multiple data protection log and switch to the another protection log. This command is valid only if dual or multiple data protection logging is in effect.

In nucleus cluster environments, the GLOBAL option can be used to close and switch dual or multiple protection logs in all active cluster nuclei.

FMXIO Command

Use the FMXIO command to dynamically modify the setting of the ADARUN FMXIO parameter.

HALT Command

Use the HALT command to perform a BT (back out transaction) for each active ET logic user's session, then terminate the Adabas session. No dumps are produced by HALT.

In nucleus cluster environments, the GLOBAL option can be used to perform a BT for all active ET logic user sessions and terminate the Adabas session in all active cluster nuclei.

INDEXCROSSCHECK Command

Use the INDEXCROSSCHECK command to turn index cross-checking on and off. Index cross-checking is a process Adabas uses to ensure that a data storage record it is reading actually matches the descriptor value in the index by which the record was found. When index cross-checking is turned on, Adabas extracts the descriptor value from the record being read and compares it to the value used for positioning in the index. If there is a mismatch, Adabas returns response code 175 (ADARSP175). Valid values are "YES" and "NO".

If "YES" is specified (the default value), Adabas extracts the descriptor value from the record being read and compares it to the value used for positioning in the index. If the two values are not equal, Adabas checks for a parallel update command on the same record and retries after that update has finished. If there is no parallel update command, Adabas returns response code 175 (ADARSP175) to indicate an inconsistency between the data storage and the index.

If "NO" is specified, Adabas does not extract the descriptor value from the record, but immediately checks for a parallel update command on the same record. If there is one, even if it does not update the descriptor in question, Adabas waits until the update has finished and then retries. With this parameter setting, Adabas does not validate the index against the data storage record and does not return response code 175 (ADARSP175).

Note: Attempts to change the `INDEXCROSSCHECK` setting (via this command) in a cluster environment will be rejected. In a cluster nucleus (CLUSTER=SYSPLEX or CLUSTER=LOCAL), Adabas sets INDEXCROSSCHECK to "YES", overriding any user-specified INDEXCROSSCHECK value, and validates the descriptor value from the index against the corresponding value from the data storage.

Setting INDEXCROSSCHECK to "NO" may, under certain circumstances, reduce the CPU time required for ensuring that the Data Storage record being read matches the descriptor value by which the record was found. This applies in particular to cases where neither the descriptor itself nor (if it is a special descriptor) its parent field(s) occur in the format buffer specifying the fields to be returned and where the descriptor or one of its parents were defined near the end of the FDT.

LICREFRESH Command

Use the `LICREFRESH` command to:

- reload the license module or reread the license file from the library identified by the DDLIC JCL statement in the startup job for the nucleus
- display and check the license identified by the DDLIC JCL statement in the startup job for the nucleus.

In cluster environments, the LICREFRESH command must be run on each nucleus in the cluster.

LOCKF Command

Use the `LOCKF` command to lock the specified file. No use of the specified file is possible at any security level.

LOCKU Command

Use the `LOCKU` command to lock the specified file for all non-utility users. Adabas utilities can use the specified file normally.

LOCKX Command

Use the `LOCKX` command to lock the specified file for all users except EXU or EXF users. EXU and EXF users can use the file normally. The lock is released automatically when an EXU user issues an OP command.

LOGGING Command

Use the `LOGGING` command to start command logging.

LOGCB Command

Use the `LOGCB` command to start logging of the Adabas control block for each command logged.

LOGFB Command

Use the LOGFB command to start logging of the Adabas format buffer for each command logged.

LOGIB Command

Use the LOGIB command to start logging of the Adabas ISN buffer for each command logged.

LOGIO Command

Use the LOGIO command to start logging of Adabas I/O activity for each command logged.

LOGRB Command

Use the LOGRB command to start logging of the Adabas record buffer for each command logged.

LOGSB Command

Use the `LOGSB` command to start logging of the Adabas search buffer for each command logged.

LOGUX Command

Use the `LOGUX` command to start logging of user exit B data for inclusion in the CLOG record.

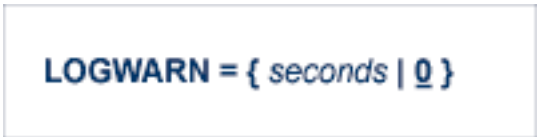
LOGVB Command

Use the `LOGVB` command to start logging of the Adabas value buffer for each command logged.

LOGVOLIO Command

Use the `LOGVOLIO` command to initiate writing of the extended I/O list to the command log.

LOGWARN Command



Use the LOGWARN command to specify how often the PLOG and CLOG status is checked and resulting alert messages are produced. Valid values range from zero (0) through 2147483647 seconds. The default is 0, indicating that no PLOG or CLOG status checking occurs and no corresponding alert messages are produced. If a non-zero value is specified for LOGWARN, a valid user exit 2 or user exit 12 must also be specified.

MXCANCEL Command

The MXCANCEL command can be used against cluster nuclei to dynamically change (while the Adabas nucleus is running) the setting of the `MXCANCEL` ADARUN parameter for a nucleus. This command can be used to specify the maximum number of seconds for which one cluster nucleus waits for the termination of another nucleus in the cluster that it has canceled for not responding to an internal, intracluster command. Valid values range from 15 through 2147483647.

If the new MXCANCEL value is less than or equal to the current MXCANCELWARN setting, the MXCANCELWARN setting is automatically set to zero (0). (You can then use the MXCANCEL-WARN command to dynamically set the MXCANCELWARN setting appropriately.)

For more information about the MXCANCEL setting for a nucleus, read about the ADARUN `MXCANCEL` parameter in the *Adabas Operations Manual*.

MXCANCELWARN Command

The MXCANCELWARN command can be used to dynamically change (while the Adabas nucleus is running) the setting of the `MXCANCELWARN` ADARUN parameter for a nucleus. This command can be used to specify the number of seconds after an intracluster cancellation request is made when the cluster nucleus requesting the cancellation should issue warnings about the inability of the canceled peer nucleus to terminate. Valid values can be zero (0) or an integer ranging from 4 through the value of MXCANCEL minus 1 (MXCANCEL-1).

The value of the MXCANCELWARN setting must be less than the value of the MXCANCEL setting. If MXCANCELWARN is set to a value greater than or equal to the value specified for MXCANCEL, the value is rejected. If MXCANCELWARN is set to zero, no warnings are issued about canceled cluster nuclei that are slow to terminate.

For more information about the MXCANCELWARN setting for a nucleus, read about the ADARUN `MXCANCELWARN` parameter in the *Adabas Operations Manual*.

MXMSG Command

The MXMSG command can be used to dynamically change (while the Adabas nucleus is running) the setting of the `MXMSG` ADARUN parameter for a cluster nucleus. This command can be used to specify the maximum number of seconds in which one cluster nucleus waits for the response of another nucleus in the cluster to an internal, intracluster command. Valid values range from 15 through 32767.

If the new MXMSG value is less than or equal to the current MXMSGWARN setting, the MXMSGWARN setting is automatically set to zero (0). (You can then use the MXMSGWARN command to dynamically set the MXMSGWARN setting appropriately.)

For more information about the MXMSG setting for a nucleus, read about the ADARUN `MXMSG` parameter in the *Adabas Operations Manual*.

MXMSGWARN Command

The MXMSGWARN command can be used to dynamically change (while the Adabas nucleus is running) the setting of the `MXMSGWARN` ADARUN parameter for a cluster nucleus. This command can be used to specify the number of seconds after an intracluster request is made when the cluster nucleus issuing the intracluster request should issue warnings about the failure of the target cluster nucleus to respond. Valid values can be zero (0) or an integer ranging from 4 through the value of MXMSG minus 1 (MXMSG-1).

The value of MXMSGWARN must be less than the value of MXMSG. If MXMSGWARN is set to a value greater than or equal to the value specified for MXMSG, the value is rejected. If MXMSGWARN is set to zero, no warnings are issued about cluster nuclei that are slow to respond.

For more information about the MXMSGWARN setting for a nucleus, read about the ADARUN `MXMSGWARN` parameter in the *Adabas Operations Manual*.

MXSTATUS Command

The MXSTATUS command can be used to dynamically change (while the Adabas nucleus is running) the setting of the MXSTATUS ADARUN parameter for a cluster nucleus. This command can be used to specify the number of seconds between member-level XCF status monitoring heartbeats. Valid values range from 15 through 21474836.

Note: The MXSTATUS command is only used for Adabas Cluster Services and not for Adabas Parallel Services. Adabas Parallel Services does not use XCF and ignores the setting.

The MXSTATUS command can only be used to change the value of the MXSTATUS parameter if the ADARUN MXSTATUS parameter is not zero (0). This command cannot be used to turn status monitoring on (by specifying a nonzero value if the ADARUN MXSTATUS setting is zero) or to turn it off (by specifying a value of zero when the ADARUN MXSTATUS setting is nonzero). However, setting MXSTATUS to a very high value is effectively the same as turning status monitoring off (monitoring will occur very infrequently at least).

For more information about the MXSTATUS setting for a nucleus, read about the ADARUN MXSTATUS parameter in the *Adabas Operations Manual*.

MXWTOR Command

The optional MXWTOR command can be used to dynamically change (while the Adabas nucleus is running) the setting of the `MXWTOR` ADARUN parameter for a cluster nucleus. This command can be used to specify the maximum number of seconds that a cluster nucleus should wait for an operator response to a self-terminating operator query. Valid values range from 15 through 64800 or zero (0).

If MXWTOR is set to zero, the operator query does not occur (no ADAX9J messages are written) and no operator intervention is expected.

For more information about the MXWTOR setting for a nucleus, read about the ADARUN `MXWTOR` parameter in the *Adabas Operations Manual*.

NOLOGGING Command

Use the `NOLOGGING` command to stop or prevent command logging.

NOLOGCB Command

Use the `NOLOGCB` command to stop or prevent logging of the Adabas control block.

NOLOGFB Command

Use the `NOLOGFB` command to stop or prevent logging of the Adabas format buffer.

NOLOGIB Command

Use the `NOLOGIB` command to stop or prevent logging of the Adabas ISN buffer.

NOLOGIO Command

Use the `NOLOGIO` command to stop or prevent logging of Adabas I/O activity.

NOLOGRB Command

Use the `NOLOGRB` command to stop or prevent logging of the Adabas record buffer.

NOLOGSB Command

Use the `NOLOGSB` command to stop or prevent logging of the Adabas search buffer.

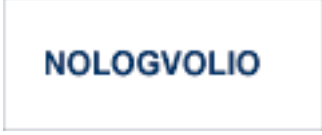
NOLOGUX Command

Use the `NOLOGUX` command to stop logging of user exit B data for inclusion in the CLOG record.

NOLOGVB Command

Use the `NOLOGVB` command to stop or prevent logging of the Adabas value buffer.

NOLOGVOLIO Command



Use the `NOLOGVOLIO` command to terminate (stop) writing the extended I/O list to the command log.

NWCONNECT Command

```
NWCONNECT
```

Use the NWCONNECT command to retry establishing the Entire Net-Work target associated with the nucleus's IDT entry. For classic Adabas nuclei, this is the DBID; for Adabas Cluster Services or Adabas Parallel Services, this is the nucleus ID (NUCID).

During nucleus initialization, certain Entire Net-Work errors may have prevented the target from being established, resulting in message ADAM76. Other errors may prevent Entire Net-Work from defining the target when it is started after the nucleus is initialized. The Entire Net-Work operator command DISPLAY TARGETS may be used to see whether the DBID target is known to Entire Net-Work.

Note: Adabas Cluster Services and Adabas Parallel Services maintain the Entire Net-Work DBID target using a different protocol. The nucleus will attempt to reestablish the DBID target automatically at timed intervals.

ONLRESUME Command

```
ONLRESUME=X'identifier'
```

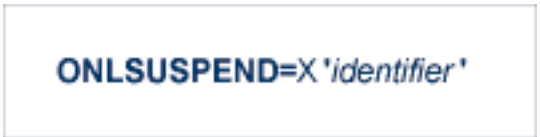
Use the `ONLRESUME` command to resume a previously suspended online reorder, invert, or Event Replicator for Adabas initial-state process.

ONLSTOP Command

```
ONLSTOP=X'identifier'
```

Use the `ONLSTOP` command to stop an online reorder, invert, or Event Replicator for Adabas initial-state process cleanly. The process continues up to its next interrupt point in order to produce a consistent state, and then terminates after performing all necessary cleanup.

ONLSUSPEND Command>



Use the `ONLSUSPEND` command to suspend an online reorder, invert, or Event Replicator for Adabas initial-state process. The process continues up to its next interrupt point in order to produce a consistent state, performs a command throwback, and enters a state where it cannot be selected for processing. This command is useful if the online process is consuming too much of the nucleus resources.

RALOCKF Command

Use the `RALOCKF` command to release the advance-lock on the specified file (see ALOCKF command) without running the utility.

This command is available in cluster and non-cluster environments.

RALOCKFA Command

Use the `RALOCKFA` command to release the advance-lock on all files for which it has been set (see ALOCKF command) without running the utility.

This command is available in cluster and non-cluster environments.

RDUMPST Command

```
RDUMPST
```

Use the RDUMPST command to terminate online dump status. This command is normally used if online execution of the ADASAV utility has terminated abnormally.

READONLY Command

```
READONLY={YES | NO}
```

Use the READONLY command to switch READONLY status on or off. A value of "YES" switches it on; a value of NO switches it off.

REFSTPRT Command

```
REFSTPRT={YES | NO}
```

Use the REFSTPRT command to alter the setting of the ADARUN REFSTPRT parameter while the nucleus is active. This operator command allows you to dynamically specify whether printing of statistics is done before an ADADBS REFRESHSTATS utility function run or before interval statistics have been refreshed using Adabas Online System. For more information, read *REFSTPRT Parameter: Print Statistics after Refresh Statistics*.

REVIEW Command

```
REVIEW={ NO | LOCAL | hub-id }
```

Use the REVIEW command to:

- deactivate Adabas Review,
- change from hub mode to local mode, or

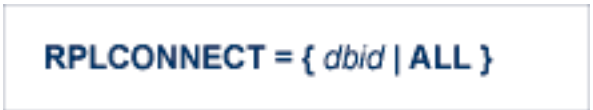
- to specify or change the Adabas Review hub with which a nucleus communicates.

RPLCHECK Command

Use this command to perform the replication cross-check function for all active databases known (defined in one or more subscriptions) to the Event Replicator Server. When this command is run using the ADADBS OPERCOM function, the information about the cross-check function is printed to the ADADBS DDDRUCK data set. The information printed by ADADBS is the same as the information printed by the Event Replicator Server during the cross-check process initiated by the RPLCHECK operator command.

Note: This command can only be issued against an Event Replicator Server; it is not valid for the Adabas nucleus. If this command is issued against a database that is not an Event Replicator Server, error messages result.

RPLCONNECT Command



Use this command to dynamically force a connection attempt to either a specific Event Replicator Server or Adabas database ID or to all related Event Replicator Server or Adabas database IDs.

One of the parameters of the RPLCONNECT command must be specified. There is no default. The parameters are described in the following table:

Parameter	Forces a reconnection attempt with:
ALL	All known Event Replicator Server or Adabas database IDs
dbid	The specified Event Replicator Server or Adabas database ID.

RPLCONNECTCOUNT Command

```
RPLCONNECTCOUNT = nnn
```

Use this command to dynamically specify the number of connection attempts made for the Adabas or Event Replicator Server nucleus after an attempt fails (response 148 is issued).

For *nnn*, specify a valid integer ranging from zero (0) through 2147483647. A value of zero indicates that no connection attempts should occur; a value of zero makes the most sense in situations where the Adabas database and the Event Replicator Server execute together on the same logical partition (LPAR). If the Adabas database and the Event Replicator Server execute on different LPARs, however, setting a real value using this command helps avoid errors that might arise if network problems occur because the network is not started or a network connection between the Adabas database and the Event Replicator Server is lost.

RPLCONNECTINTERVAL Command

```
RPLCONNECTINTERVAL = nnn
```

Use this command to dynamically specify the interval between connection attempts made for the Adabas or Event Replicator Server nucleus after an attempt fails (response 148 is issued).

For *nnn*, specify the number of seconds for the interval, ranging from zero (0) through 2147483647 seconds. A value of zero indicates that no connection attempts should occur; a value of zero makes the most sense in situations where the Adabas database and the Event Replicator Server execute together on the same logical partition (LPAR). If the Adabas database and the Event Replicator Server execute on different LPARs, however, setting a real value using this command helps avoid errors that might arise if network problems occur because the network is not started or a network connection between the Adabas database and the Event Replicator Server is lost.

SECUID Command

```
SECUID = { ALLOW | REQUIRE | WARN }
```

Use the SECUID command to alter the ADARUN SECUID parameter while the nucleus is active. For complete information about the SECUID ADARUN parameter, read *SECUID Parameter: Security System User ID Requirement Level*, in the *Adabas Operations Manual*.

SMFDETAIL Command

SMFDETAIL = { ALL | NONE | *section-name-list* **}**

Adabas SMF records can contain a variable set of detail sections in Interval and Termination records (subtypes 2 and 3). This command allows you to override the setting of the SMFDETAIL ADARUN parameter defined for this Adabas sesssion. Using this command you can select the detail section types in Interval and Termination records that should be included in the Adabas SMF records. Unlike the SMFDETAIL ADARUN parameter, the value or values you specify for the SMFDETAIL command do *not* need to be enclosed in parentheses. If you specify NONE or ALL, they should be specified alone. However, you can specify one or more of the other detail section names (CMD, CSHB, CSHF, CSHG, CSHP, FILE, IODD, LOCK, MSGB, MSGC, MSGH, PARM, STG, THRD, ZIIP or USER) in one SMFDETAIL parameter, separating each value with a comma.

The following table describes the meaning of the possible detail section names that can be used in the SMFDETAIL command:

Detail Section Name	Description
ALL	Generate all possible detail sections in the Adabas SMF records. If this value is specified, no others can be specified on the SMFDETAIL parameter.
CMD	Generate Adabas command activity detail sections in the Adabas SMF records.
CSHB[1]	Generate global cache activity by block detail sections in the Adabas SMF records.
CSHF[1]	Generate global cache activity by Adabas file number detail sections in the Adabas SMF records.
CSHG[1]	Generate global cache activity detail sections in the Adabas SMF records.
CSHP[2]	Generate Adabas Parallel Services cache activity detail sections in the Adabas SMF records.
FILE	Generate Adabas file activity detail sections in the Adabas SMF records.
IODD	Generate I/O activity by DD statement detail sections in the Adabas SMF records.
LOCK[1]	Generate global lock activity detail sections in the Adabas SMF records.
MSGB[1]	Generate internucleus messaging control block activity detail sections in the Adabas SMF records.
MSGC[1]	Generate internucleus messaging count detail sections in the Adabas SMF records.
MSGH[1]	Generate internucleus messaging service time histogram detail sections in the Adabas SMF records.
NONE	Generate no detail sections in the Adabas SMF records. If this value is specified, no others can be specified on the SMFDETAIL parameter.
PARM	Generate ADARUN parameter value detail sections in the Adabas SMF records.

Detail Section Name	Description
STG	Generate Adabas storage pool detail sections in the Adabas SMF records.
THRD	Generate thread activity detail sections in the Adabas SMF records.
ZIIP	Generate zIIP statistics detail sections in the Adabas SMF records.
USER	Generate user-defined details sections in the Adabas SMF records. If USER is specified, a value for the UEXSMF parameter should also be specified to identify the user exit to be invoked to generate the user-defined detail section.

[1] *Available only in cluster environments (Adabas Cluster Services or Adabas Parallel Services must be installed).*

[2] *Available only in cluster environments with Adabas Parallel Services installed.*

SMFDETAILADD Command

Adabas SMF records can contain a variable set of detail sections in Interval and Termination records (subtypes 2 and 3). This command allows you to add specific detail sections to your Adabas SMF records for the running Adabas session. The sections you specify are added to those already specified for the Adabas sesssion. If more than one section is listed on an SMFDETAILADD command, separate the section names with commas.

The following table describes the meaning of the possible detail section names that can be used in the SMFDETAILADD command:

Detail Section Name	Description
CMD	Generate Adabas command activity detail sections in the Adabas SMF records.
CSHB[1]	Generate global cache activity by block detail sections in the Adabas SMF records.
CSHF[1]	Generate global cache activity by Adabas file number detail sections in the Adabas SMF records.
CSHG[1]	Generate global cache activity detail sections in the Adabas SMF records.
CSHP[2]	Generate Adabas Parallel Services cache activity detail sections in the Adabas SMF records.
FILE	Generate Adabas file activity detail sections in the Adabas SMF records.
IODD	Generate I/O activity by DD statement detail sections in the Adabas SMF recods.
LOCK[1]	Generate global lock activity detail sections in the Adabas SMF records.
MSGB[1]	Generate internucleus messaging control block activity detail sections in the Adabas SMF records.

Detail Section Name	Description
MSGC[1]	Generate internucleus messaging count detail sections in the Adabas SMF records.
MSGH[1]	Generate internucleus messaging service time histogram detail sections in the Adabas SMF records.
PARM	Generate ADARUN parameter value detail sections in the Adabas SMF records.
STG	Generate Adabas storage pool detail sections in the Adabas SMF records.
THRD	Generate thread activity detail sections in the Adabas SMF records.
ZIIP	Generate zIIP statistics detail sections in the Adabas SMF records.
USER	Generate user-defined details section sin the Adabas SMF records. If USER is specified, a value for the UEXSMF ADARUN parameter can also be specified to identify the user exit that should be used to generate the user-defined detail section.

[1] *Available only in cluster environments (Adabas Cluster Services or Adabas Parallel Services must be installed).*

[2] *Available only in cluster environments with Adabas Parallel Services installed.*

SMFDETAILDEL Command

Adabas SMF records can contain a variable set of detail sections in Interval and Termination records (subtypes 2 and 3). This command allows you to remove specific detail sections from your Adabas SMF records for the running Adabas session. The sections you specify are removed from those already specified for the Adabas sesssion. If more than one section is listed on an SMFDETAILDEL command, separate the section names with commas.

The following table describes the meaning of the possible detail section names that can be used in the SMFDETAILDEL command:

Detail Section Name	Deletes
CMD	Adabas command activity detail sections in the Adabas SMF records.
CSHB[1]	Global cache activity by block detail sections in the Adabas SMF records.
CSHF[1]	Global cache activity by Adabas file number detail sections in the Adabas SMF records.
CSHG[1]	Global cache activity detail sections in the Adabas SMF records.
CSHP[2]	Adabas Parallel Services cache activity detail sections in the Adabas SMF records.
FILE	Adabas file activity detail sections in the Adabas SMF records.

Detail Section Name	Deletes
IODD	I/O activity by DD statement detail sections in the Adabas SMF records.
PARM	ADARUN parameter value detail sections in the Adabas SMF records.
LOCK[1]	Global lock activity detail sections in the Adabas SMF records.
MSGB[1]	Internucleus messaging control block activity detail sections in the Adabas SMF records.
MSGC[1]	Internucleus messaging count detail sections in the Adabas SMF records.
MSGH[1]	Internucleus messaging service time histogram detail sections in the Adabas SMF records.
STG	Adabas storage pool detail sections in the Adabas SMF records.
THRD	Thread activity detail sections in the Adabas SMF records.
ZIIP	zIIP statistics detail sections in the Adabas SMF records.
USER	User-defined details section sin the Adabas SMF records.
[1] *Available only in cluster environments (Adabas Cluster Services or Adabas Parallel Services must be installed).* [2] *Available only in cluster environments with Adabas Parallel Services installed.*	

SMFINTERVAL Command

SMFINTERVAL = { GLOBAL | NONE | SUBSYS | *minutes* **}**

Adabas SMF records can be generated at specific intervals. The SMFINTERVAL command enables and disables interval recording and specifies the interval or the source from which the interval can be derived.

The interval can be one of several values from z/OS specifications or an explicit interval in minutes. Interval records contain a product detail section and whatever detail sections are selected in the SMFDETAIL parameter, except for the ADARUN parameter detail section which are not included in SMF interval records.

The following table describes the meaning of the specifications that can be used in the SMFINTERVAL command:

Valid Value	Description
GLOBAL	Generate all interval SMF records at the rate established by the INTVL and SYNCVAL SMF parameters in PARMLIB member SMFPRM*xx*.
NONE	Generate no interval SMF records.
SUBSYS	Generate interval SMF records at the rate specified in PARMLIB member SMFPRM*xx* for the subsystem identified in the ADARUN SMFSUBSYS parameter.

Valid Value	Description
minutes	Generate interval SMF records at the specified interval, in minutes. Valid minute values can range from 1 through 9999..

SMFRECNO Command

Use this command to override the SMFRECNO setting currently specified for this Adabas session (either through the SMFRECNO ADARUN parameter or by another SMFRECNO command). This command sets the Adabas SMF record number used for user-defined SMF records. IBM designates the range of SMF numbers from 128 through 255 for user-defined records, so valid values range from 128 through 255.

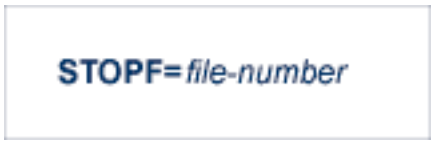
SMFSUBSYS Command

This command overrides any other SMFSUBSYS setting active in the Adabas session (either via the ADARUN SMFSUBSYS parameter or another SMFSUBSYS command). It allows you to associate the Adabas SMF records with an IBM or user-defined subsystem. The z/OS systems staff can provide different sets of SMF system parameters for IBM-defined subsystems. Up to eight user-specified subsystems can be defined, each with their own set of system parameters. This parameter allows you to optionally identify one of these subsystem names to be used with Adabas SMF recording, if the one you want is different from the current one.

The possible values for this command are:

- CURRENT: This is the default value and associates the Adabas SMF record with the IBM-defined subsystem under which the Adabas nucleus is active. The subsystem may be TSO for a nucleus running in a TSO session, STC for a starting task or the name of the job entry subsystem under which a batch job is running, JES2 or JES3.
- An explicit subsystem name can be specified. It may be either an IBM-defined name or a user-defined name from PARMLIB member SMFPRM*xx*. The subsystem name is one to four characters long. The first character must be alphabetic or national (#, @, or $) and the remaining characters can be either alphanumeric or national characters. Contact your z/OS administrator for more information about the subsystem names available in your z/OS environment.

STOPF Command



Use the `STOPF` command to stop all users who are using the specified file. Any open transactions of the stopped users will be backed out. A stopped user who returns (by sending a command) will receive response code 9 (ADARSP009).

This command does not stop EXF or UTI users.

STOPI Command

Use the `STOPI` command to stop all users who have not executed a command during the specified time interval (in seconds). Any open transactions of the stopped users will be backed out. A stopped user who returns (by sending a command) will receive response code 9 (ADARSP009).

This command does not stop EXF or UTI users.

STOPSU Command

Use the STOPSU command to stop and delete all users with the specified security user ID (*`secuid`*). Any open transactions of the stopped users will be backed out. No response code is issued; the next time the stopped user issues a command, a new user queue element (UQE) is created.

Caution: If Adabas is running with ADARUN OPENRQ=NO (specifying that users are not required to issue an OP as the first command of the session), run the STOPSU command only if you are certain that the users to be deleted are no longer active. If a user with an open transaction is deleted, but then returns (by sending a command), no indication is given about the transaction backout. If the user continues the transaction, logical inconsistencies in the database could occur. If this is a concern, use the STOPSUR command instead.

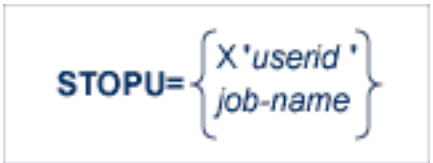
Note: The STOPSU=*secuid* command is not allowed for online reorder or invert processes. Use the ONLSTOP=X'*identifier*' command instead.

STOPSUR Command

Use the STOPSUR command to stop a user with a specified security user ID (*secuid*). Any open transactions of the stopped user are backed out. The stopped user is only deleted after he or she has issued a subsequent command and response code 22 (ADARSP22), subcode 54 has been issued in response to that command. This response code-subcode combination is used to notify users that their Adabas activity has been halted and their user session resources have been freed. Only after the response code-subcode combination has been issued is the user queue element (UQE) of the stopped user deleted.

Note: The STOPSUR=*secuid* command is not allowed for online reorder or invert processes. Use the ONLSTOP=X'*identifier*' command instead.

STOPU Command



Use the STOPU command to stop and delete the user with the Adabas-assigned user ID (in the form shown in the display commands), or stop and delete all users with the specified job name (*job-name*). Any open transactions of the stopped users will be backed out. No response code is issued; the next time a stopped user issues a command, a new user queue element (UQE) is created.

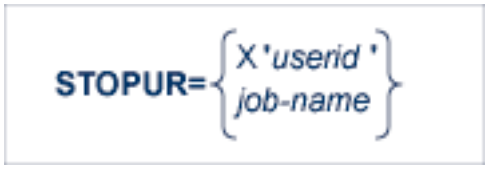
Caution: If Adabas is running with ADARUN OPENRQ=NO (specifying that users are not required to issue an OP as the first command of the session), run the STOPU command only if you are certain that the users to be deleted are no longer active. If a user with an open transaction is deleted, but then returns (by sending a command), no indication is given about the transaction backout. If the user continues the transaction, logical inconsistencies in the database could occur. If this is a concern, use the STOPUR command instead.

Note: The STOPU=X'*userid*' command is not allowed for online reorder or invert processes. Use the ONLSTOP=X'*identifier*' command instead.

The user ID must be specified in hexadecimal format; for example:

```
STOPU=X'1CF2'
```

STOPUR Command



Use the STOPUR command to stop a user with the Adabas-assigned user ID (in the form shown in the display command) or to stop a user with the specified job name. Any open transactions of the stopped user are backed out. The stopped user is only deleted after he or she has issued a subsequent command and response code 22 (ADARSP22), subcode 54 has been issued in response to that command. This response code-subcode combination is used to notify users that their Adabas activity has been halted and their user session resources have been freed. Only after the response code-subcode combination has been issued is the user queue element (UQE) of the stopped user deleted.

Note: The STOPUR=X'*userid*' command is not allowed for online reorder or invert processes. Use the ONLSTOP=X'*identifier*' command instead.

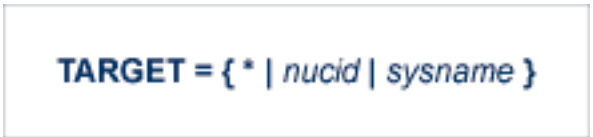
The user ID must be specified in hexadecimal format; for example:

```
STOPUR=X'1CF2'
```

SYNCC Command

Use the `SYNCC` command to force synchronization for all ET users. The nucleus waits for all ET users to reach ET status.

TARGET Command



Use this command against an Adabas Cluster Services nucleus to specify the system on which the Entire Net-Work DBID target for the cluster database is to be established. Specify a system name or the NUCID of a cluster nucleus on that system. The DBID target can be established on any system where a nucleus of the cluster is active. It is used to route commands from users on remote systems with no active PLXCB. Such systems may be part of the z/OS sysplex or other Entire Net-Work nodes outside the sysplex.

The command instructs Entire Net-Work to route requests to an Entire Net-Work node on an implicitly or explicitly specified system image. All future commands will be routed to the new destination. If there are existing users who have been routed using the DBID target and the target is relocated to another Entire Net-Work node, they will be reassigned to any cluster nuclei on the new node. These users lose their existing sessions with their previously assigned nuclei. As a consequence, they may receive response code 9 (ADARSP009) on the first command after the target is moved. Furthermore, they may receive response code 21 (ADARSP021) if they attempt to reuse previously defined command IDs (logical read sequences or search results).

Several possible operands can be used to specify the desired DBID target assignment, as described in the following table.

Operand	Description
*	Specify an asterisk (*) to assign the DBID target to the Entire Net-Work node associated with the nucleus receiving the command.
nucid	Specify the nucleus ID (as defined in the ADARUN NUCID parameter) of an active cluster nucleus to assign the DBID target to the Entire Net-Work node associated with that nucleus.
sysname	Specify a system name (LPAR name) to assign the DBID target to the Entire Net-Work node associated with an active cluster nucleus on that system.

Note: The DBID target identifies an Entire Net-Work node, not a specific nucleus on a system. The DBID target is jointly serviced by all nuclei on that Entire Net-Work node.

TCPIP Command

Use the `TCPIP` command to open or close a direct TCP/IP link to the Adabas nucleus or to close all TCP/IP links when no URL is specified. You can also use the TCP/IP command to perform any valid Entire Net-Work operator command (*net-work_cmd*) or direct it to a TCP/IP link to the Adabas nucleus. The Entire Net-Work operator commands you can use are described in the section entitled *Entire Net-Work Operator Commands* under the section *Statement and Command Reference* in the *Entire Net-Work Reference Guide*. These Entire Net-Work commands must be preceded by a plus character ("+").

Note: The OPEN command can be replaced by the START command and the CLOSE command can be replaced by ADAEND, END, HALT, STOP or TERMINATE, as used by Entire Net-Work.

This command is only possible when the ADARUN parameter `TCPIP` is set to "YES" and all conditions for that setting have been met. This command can be used to close the URL set in the ADARUN `TCPURL` parameter, or to open or close additional TCP/IP links.

You must identify the universal resource locator (URL) for the TCP/IP link you want to open or close. The URL is a 20-byte address that conforms to the RFC specification for URLs. For information on how these URLs should be specified, read about the TCPURL ADARUN parameter, elsewhere in your Adabas documentation.

Examples

```
TCPIP=OPEN=OES::12216 ↩
```

```
TCPIP=CLOSE
```

To turn logging on:

```
TCPIP=+LOG=YES
```

TNAA Command

Use the `TNAA` command to set the non-activity time limit for access-only users. This value must be greater than zero and replaces the value set by the `TNAA` ADARUN parameter.

In nucleus cluster environments, the TNAA command is global by definition and affects all nuclei in the cluster.

TNAE Command

Use the TNAE command to set the non-activity time limit for ET logic users. This value must be greater than zero and replaces the value set by the TNAE ADARUN parameter.

In nucleus cluster environments, the TNAE command is global by definition and affects all nuclei in the cluster.

TNAX Command

Use the TNAX command to set the non-activity time limit for exclusive control users. This value must be greater than zero and replaces the value set by the TNAX ADARUN parameter.

In nucleus cluster environments, the TNAX command is global by definition and affects all nuclei in the cluster.

TT Command

Use the TT command to set the transaction time limit for ET logic users. This value must be greater than zero and replaces the value set by the TT ADARUN parameter.

In nucleus cluster environments, the TT command is global by definition and affects all nuclei in the cluster.

UNLOCKF Command

Use the `UNLOCKF` command to unlock the specified file. File usage is restored to its pre-locked status.

UNLOCKU Command

Use the `UNLOCKU` command to unlock the specified file that was previously locked for all non-utility users. File usage is restored to its pre-locked status.

UNLOCKX Command

Use the `UNLOCKX` command to unlock the specified file that was previously locked for non-exclusive control users. File usage is restored to its pre-locked status.

UTIONLY Command

Use the `UTIONLY` command to switch the ADARUN `UTIONLY` status parameter on or off. The default is NO.

DSTAT Utility Operator Command

Use the `DSTAT` command to display the current ADACHK, ADALOD, ADAORD, ADARES, ADASAV, or ADAULD operating status. The following are examples of the output that results when `DSTAT` is entered during specific Adabas utility operations:

Note: ADAORD, ADARES, and ADAULD do not accept operator commands if they run in MODE=SINGLE.

Example 1: ADACHK

Messages ADAU93 appears in addition to the following statistics:

```
19:53:04 ADAU08 44824 Operator Type-In: DSTAT
 19:53:04 ADAU93 ADACHK File=1, Processing in progress
 19:53:04
 19:53:04 *****ADACHK Nucleus Statistics - Error Verifications*****
 19:53:04 Number of transient errors = 0
 19:53:04 Number of nucleus verification calls = 0
 19:53:05 Number of nucleus retries = 0
 19:53:05 Number of AC blocks returned from nucleus = 0
 19:53:05 Number of Index blocks returned from nucleus = 0
 19:53:05 Number of Data blocks returned from nucleus = 0
 19:53:05 Number of nucleus status changes = 0
 19:53:05 Number of Buffer flushes = 0
```

For a description of these statistics, read *ADACHK Statistics*, in the *Adabas Utilities Manual*.

Example 2: ADALOD

```
ADAU00 dbid OPERATOR TYPE-IN : DSTAT ADAU22 dbid LOADING DATA STORAGE. REC-NO=3599
ADAU00 dbid OPERATOR TYPE-IN : DSTAT ADAU21 dbid SORTING/LOADING DESCRIPTOR AA
```

Example 3: ADAORD

```
ADAU08 dbid OPERATOR TYPE-IN : DSTAT ADAU26 dbid UNLOADING INDEX. FILE=1
ADAU08 dbid OPERATOR TYPE-IN : DSTAT ADAU25 dbid UNLOADING DATASTORAGE. FILE=2
ADAU08 dbid OPERATOR TYPE-IN : DSTAT ADAU29 dbid LOADING DATASTORAGE. FILE=2
```

Example 4: ADARES

```
ADAU08 dbid OPERATOR TYPE-IN : DSTAT REGENERATE INPUT VOLUME = BMC002, PLOG-NUM = 12
FROMBLK =        1, FROMTIME = 1996-04-10 11:27:56
TOBLK =          1, TOTIME   = 1996-04-10 11:27:56
```

Example 5: ADASAV

```
ADAU08 dbid OPERATOR TYPE-IN : DSTAT ADAU92 dbid       STILL INITIALIZING
ADAU08 dbid OPERATOR TYPE-IN : DSTAT ADAU10 dbid 435 BLOCKS OUT OF 465 SAVED
ADAU08 dbid OPERATOR TYPE-IN : DSTAT ADAU11 dbid 342 BLOCKS OUT OF 451 RESTORED
```

Example 6: ADAULD

```
ADAU08 dbid OPERATOR TYPE-IN : DSTAT ADAU67 dbid UNLOADING FILE=17, RECNO=2875
```

SMGT Operator Command

The Adabas error handling and message buffering facility uses a single operator command, `SMGT`, followed by a comma and one or more operands:

SMGT, *operand* **[,** *operand* **],...**

Valid *operands* are: `ABNORMAL`, `ACTPIN`, `ADDPIN`, `DEACTPIN`, `DELPIN`, `DISPLAY`, `DUMP`, `MSGBUF`, `OFF`, `ON`, `SNAP`, `XACTIVATE`, `XCRITICAL`, `XDEACTIVATE`, `XLOAD`, and `XNOTCRITICAL`. Some of these operands are mutually exclusive. All operands are described in *Operands for SMGT*, elsewhere in this section.

Operands may require that you enter one or more of the following variables:

Variable Type	Description
exit-code	The code that identifies an exit routine to an SMGT operator command is one of the following: ■ UEX*n*, where *n* is a single-digit user exit number ■ UX*nn*, where *nn* is a double-digit user exit number ■ HX*nn*, where *nn* is a hyperdescriptor exit number (single-digit numbers are preceded by a zero; e.g., HX02) ■ CX00 (the Adabas Caching Facility user exit) ■ SX00 (the PIN routine user exit)
start, *end*	The range of addresses for the SNAP operand where *start* is the hexadecimal address where the SNAP dump begins and *end* is the hexadecimal address where it ends.
module-name	The name of the module. For the XLOAD operand, it is the name of the exit routine module to be loaded; for ADDPIN and DELPIN operands, it is the name of the PIN module to be added or deleted, respectively.
pin-number	When a PIN is added, it is assigned a number that can be found using the DISPLAY=PINS operand. This pin number is used for the ACTPIN and DEACTPIN operands to identify the PIN routine to be activated or deactivated, respectively.

Acceptable abbreviations for operands are provided in mixed case notation (capital letters required, lowercase letters optional). Default values for operands are underlined.

Operands for SMGT

SMGT,{ ABNormalterm | MSGbuf } = { ON | OFF }

The ABNORMALTERM (ABN) operand determines whether the error handling and message buffering facility will handle abnormal termination errors.

The MSGBUF (MSG) operand temporarily deactivates (OFF) or reactivates (ON) message buffering.

The ABN and MSG operands are mutually exclusive; if one is specified on an individual SMGT command, the other cannot be.

SMGT,{ ACTpin | DEACTpin } = *pin-number*

The ACTPIN (ACT) operand is used to activate an individual PIN routine or to reactivate it after it has been temporarily deactivated.

The DEACTPIN (DEACT) operand is used to deactivate an individual PIN routine.

The ACT and DEACT operands are mutually exclusive; if one is specified on an individual SMGT command, the other cannot be.

```
SMGT,{ ADDpin | DELpin } = module-name
```

The ADDPIN (ADD) operand adds PIN routines to the error handling facility. The PIN routine module indicated is loaded and the PINs that are found in it are added to the facility. When a PIN is added, it is assigned a number which can be found using the DISPLAY=PINS operand.

The DELPIN (DEL) operand deletes a PIN module and all the PINs it contains from the facility.

The ADD and DEL operands are mutually exclusive; if one is specified on an individual SMGT command, the other cannot be.

```
SMGT,Display = { ALL | EXITS | MSGBUF | PINS | SUMMARY | LAST }
```

The DISPLAY (D) operand writes status and history information about the error handling and message buffering facility to the job log and to DDPRINT:

ALL	(the default) displays all reports
EXITS	displays current user exit, hyperdescriptor exit, and other exit status
MSGBUF	displays message buffering status
PINS	displays PIN routine status
SUMMARY	displays only the summary information from ALL
LAST	displays details of the most recent recovery action

Sample output for the various DISPLAY values is provided in *SMGT Display Output Samples*, in *Adabas Operations*.

```
SMGT,DUMP = { ON | OFF }
```

The DUMP operand determines whether a full system dump is taken for the Adabas nucleus in the event of an error. The default (OFF) means that only a snap dump is taken.

Note: To use this command successfully under z/OS, the data set ADASNAP must be provided in the Adabas startup JCL. For more information, read *Adabas Session Execution*, in *Adabas Operations*.

```
SMGT,{ ON | OFF }
```

The `OFF` operand deactivates the error handling and message buffering facility temporarily; the `ON` operand reactivates it.

When SMGT=OFF:

- The only valid `SMGT` operands that can be specified after SMGT=OFF is specified are `ON` (in a new `SMGT` command) and `DISPLAY`. All other SMGT commands are rejected until SMGT=ON is issued.
- All other functions of the error handling facility are disabled. PIN modules cannot be invoked. Any user exits marked NOTCRITICAL are treated as CRITICAL; that is, the nucleus terminates abnormally if an error occurs in the exit.

The `ON` and `OFF` operands are mutually exclusive; if one is specified on an individual `SMGT` command, the other cannot be.

```
SMGT,SNAP [= ( start , end ) ]
```

The `SNAP` operand displays a formatted dump of the nucleus without error diagnostics. If `SNAP` is specified without any additional parameters, the whole nucleus is displayed; if hexadecimal addresses are specified for start and end, the `SNAP` dump is displayed only for that range of addresses.

The `SNAP` operand can degrade system performance as long as it is active.

Note: To use this command successfully under z/OS, the data set ADASNAP must be provided in the Adabas startup JCL. For more information, read *Adabas Session Execution*, in *Adabas Operations*.

SMGT,{ XActivate | XDeactivate } = *exit-code*

The XACTIVATE (XA) operand activates a loaded exit module; the XDEACTIVATE (XD) operand deactivates an active exit module.

The XA and XD operands are mutually exclusive; if one is specified on an individual SMGT command, the other cannot be.

SMGT,{ XNotcritical | XCritical } = *exit-code*

The XNOTCRITICAL (XN) operand changes the status of an exit from the default critical to noncritical for the functioning of the Adabas nucleus. Any abnormal termination or program check in a noncritical exit results in the exit being automatically deactivated; however, the Adabas nucleus continues to run. The disabled user exit is not recalled until it is reset. Once the exit error has been corrected, the exit can be reactivated using the XACTIVATE operand.

The XCRITICAL (XC) operand changes the status of an exit from noncritical back to the default critical for the functioning of the Adabas nucleus. Any abnormal termination or program check in a critical exit causes the Adabas nucleus to terminate.

The XN and XC operands are mutually exclusive; if one is specified on an individual SMGT command, the other cannot be.

SMGT,XLoad = { *exit-code* | (*exit-code*, *module-name*) }

The XLOAD (XL) operand loads a new version of an exit module.

The module-name parameter is required only for new exits. Because the default is the previous module name, the parameter is optional for exits that have previously been used. The parameter is also optional for any exit defined with a number of zero; for example, the ADACSH exit which is always named ADACSHUX.

Caution: ADACSHUX is a sample user program and is not supported under any maintenance contract agreement.

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ADACDC: Capture Delta Changes

```
ADACDC  [FILES= filelist ]
        [IGNORESPANNED]
        [ISN]
        [MAXLOGRECLEN = { n | 1048576 } ]
        [NOET]
        [PHASE={ 1 | 2 | BOTH ]
        [RESETTXF]
        [SPANREC]
        [TZ='timezone']
        [DST]
```

ADACHK ACCHECK: Check Address Converter against Data Storage

```
ADACHK  ACCHECK  [ABEND34]
                 [ERRLIM = { error-threshold-count | 100 } ]
                 [FILE= { file | file1 - filex | all-files } ]
                 [ISN= { isn | isn1 - isnx | all-ISNs } ]
                 [LAYOUT = { SHORT | MEDIUM | LONG } ]
                 [LWP = { workpoolsize | 10240K } ]
                 [MAXCALLS = { count | [ 200 | ( TOPISN-value/100 ) ] } ]
                 [NOSYNC]
                 [NOUSERABEND]
                 [SORTTYPE = { INTERNAL | EXTERNAL } ]
                 [TEST]
                 [UTYPE = { ACC | EXF | EXU } ]
```

ADACHK ASSOPRINT: Print/Dump Associator Blocks

```
ADACHK ASSOPRINT  RABN = { rabn | rabn1 - rabn2 } [ ,{ rabn | rabn1 - rabn2 } ]...
                  [ABEND34]
                  [DEVICE = device ]
                  [ERRLIM = { error-threshold-count | 100 } ]
                  [LAYOUT = { SHORT | MEDIUM | LONG } ]
                  [NOUSERABEND]
                  [TEST]
```

ADACHK CHECK: Perform all ADACHK Checks

```
ADACHK  CHECK     [ABEND34]
                  [CODE = cipherkey ]
                  [DESCRIPTOR = { desc1 [ ,desc2 ] ... | all-descriptors } ]
                  [ERRLIM = { error-threshold-count | 100 } ]
                  [FILE= { file | file1 - filex | all-files } ]
                  [LAYOUT = { SHORT | MEDIUM | LONG } ]
                  [LWP = { workpoolsize | 10240K } ]
                  [MAXCALLS = { count | [ 200 | ( TOPISN-value/100 ) ] } ]
                  [MAXDESCLEN = length | FDT-largest-descriptor ]
                  [NOSYNC]
                  [NOUSERABEND]
                  [NOVALIDATE]
                  [SORTTYPE = { INTERNAL | EXTERNAL } ]
                  [TEST]
                  [UTYPE = { ACC | EXF | EXU } ]
```

ADACHK CLOGPRINT: Print/Dump Command Log Blocks

```
ADACHK CLOGPRINT RABN = { rabn | rabn1 - rabn2 } [ ,{ rabn | rabn1 - rabn2 } ]...
                 [ABEND34]
                 [DEVICE = device ]
                 [ERRLIM = { error-threshold-count | 100 } ]
                 [LAYOUT = { SHORT | MEDIUM LONG } ]
                 [NOUSERABEND]
                 [NUMBER = { number | 1 } ]
                 [TEST]
```

ADACHK DATAPRINT: Print/Dump Data Storage Blocks

```
ADACHK DATAPRINT  RABN = { rabn | rabn1 - rabn2 } [ ,{ rabn | rabn1 - rabn2 } ]...
                  [ABEND34]
                  [DEVICE = device ]
                  [ERRLIM = { error-threshold-count | 100 } ]
                  [LAYOUT = { SHORT | MEDIUM | LONG } ]
                  [NOUSERABEND]
                  [TEST]
```

ADACHK DSCHECK: Check Data Storage

```
ADACHK  DSCHECK  [ABEND34]
                 [CODE = cipherkey ]
                 [COMPREC]
                 [ERRLIM = { error-threshold-count | 100 } ]
                 [FILE= { file | file1 - filex | all-files } ]
                 [FROMRABN = from-rabn ]
                 [ISN= { isn | isn1 - isnx | all-ISNs } ]
                 [LAYOUT = { SHORT | MEDIUM | LONG } ]
                 [LWP = { workpoolsize | 10240K } ]
                 [MAXCALLS = { count | [ 200 | ( TOPISN-value/100 ) ] } ]
                 [NOSYNC]
                 [NOUSERABEND]
                 [REPAIR]
                 [SORTTYPE = { INTERNAL | EXTERNAL } ]
                 [TEST]
                 [TORABN = to-rabn ]
                 [USAGE]
                 [UTYPE = { ACC | EXF | EXU } ]
```

ADACHK DSIMPRINT: Print Delta Save Image Data Set Blocks

```
ADACHK DSIMPRINT  RABN = { rabn | rabn1 - rabn2 } [ ,{ rabn | rabn1 - rabn2 } ]...
                  [ABEND34]
                  [DEVICE = device ]
                  [ERRLIM = { error-threshold-count | 100 } ]
                  [LAYOUT = { SHORT | MEDIUM | LONG } ]
                  [NOUSERABEND]
                  [TEST]
```

ADACHK DSSTPRINT: Print Data Storage Space Table Blocks

```
ADACHK DSSTPRINT  [ABEND34]
                  [ERRLIM = { error-threshold-count | 100 } ]
                  [LAYOUT = { SHORT | MEDIUM | LONG } ]
                  [NOUSERABEND]
                  [TEST]
```

ADACHK FCBPRINT: Print/Dump File Control Block (FCB)

```
ADACHK FCBPRINT   [ABEND34]
                  [ERRLIM = { error-threshold-count | 100 } ]
                  [FILE = { file | file1 - file2 [ ,{ file | file1 - file2 } ]... | all-files } ]
                  [LAYOUT = { SHORT | MEDIUM |LONG } ]
                  [NOUSERABEND]
                  [TEST]
```

ADACHK FDTPRINT: Print/Dump Field Definition Table (FDT)

```
ADACHK FDTPRINT   [ABEND34]
                  [ERRLIM = { error-threshold-count | 100 } ]
                  [FILE = { file | file1 - file2 [ ,{ file | file1 - file2 } ]... | all-files } ]
                  [LAYOUT = { SHORT | MEDIUM | LONG } ]
                  [NOUSERABEND]
                  [TEST]
```

ADACHK FSTPRINT: Print/Dump Free Space Table (FST)

```
ADACHK FSTPRINT   [ABEND34]
                  [ERRLIM = { error-threshold-count | 100 } ]
                  [LAYOUT = { SHORT | MEDIUM | LONG } ]
                  [NOUSERABEND]
                  [TEST]
```

ADACHK GCBPRINT: Print/Dump General Control Blocks (GCB)

```
ADACHK GCBPRINT   [ABEND34]
                  [ERRLIM = { error-threshold-count | 100 } ]
                  [LAYOUT = { SHORT | MEDIUM | LONG } ]
                  [NOUSERABEND]
                  [TEST]
```

ADACHK ICHECK: Check Associator Physical Structure

```
ADACHK  ICHECK    [ABEND34]
                  [ERRLIM = { error-threshold-count | 100 } ]
                  [FILE= { file | file1 - filex | all-files } ]
                  [LAYOUT = { SHORT | MEDIUM | LONG } ]
                  [MAXCALLS = { count | [ 200 | ( TOPISN-value/100 ) ] } ]
                  [NOSYNC]
                  [NOUSERABEND]
                  [TEST]
                  [UTYPE = { ACC | EXF | EXU } ]
```

ADACHK NIPRINT: Print/Dump Normal Index

```
ADACHK NIPRINT      [ABEND34]
                    [ERRLIM = { error-threshold-count | 100 } ]
                    [FILE = { file | file1 - file2 [ ,{ file | file1 - file2 } ]... | all-files } ]
                    [LAYOUT = { SHORT | MEDIUM | LONG } ]
                    [NOUSERABEND]
                    [TEST]
```

ADACHK PLOGPRINT: Print/Dump Protection Log Blocks

```
ADACHK PLOGPRINT RABN = { rabn | rabn1 - rabn2 } [ ,{ rabn | rabn1 - rabn2 } ]...
                 [ABEND34]
                 [DEVICE = device ]
                 [ERRLIM = { error-threshold-count | 100 } ]
                 [NUMBER = { number | 1 } ]
                 [LAYOUT = { SHORT | MEDIUM | LONG } ]
                 [NOUSERABEND]
                 [TEST]
```

ADACHK PPTPRINT: Print/Dump Parallel Participant Table (PPT)

```
ADACHK PPTPRINT     [ABEND34]
                    [ERRLIM = { error-threshold-count | 100 } ]
                    [LAYOUT = { SHORT | MEDIUM | LONG } ]
                    [NOUSERABEND]
                    [TEST]
```

ADACHK RLOGPRINT: Print/Dump Recovery Log

```
ADACHK RLOGPRINT RABN = { rabn | rabn1 - rabn2 } [ ,{ rabn | rabn1 - rabn2 } ]...
                 [ABEND34]
                 [DEVICE = device ]
                 [ERRLIM = { error-threshold-count | 100 } ]
                 [LAYOUT = { SHORT | MEDIUM | LONG } ]
                 [NOUSERABEND]
                 [TEST]
```

ADACHK SORTPRINT: Print/Dump Sort Data Set

```
ADACHK SORTPRINT RABN = { rabn | rabn1 - rabn2 } [ ,{ rabn | rabn1 - rabn2 } ]...
                 [ABEND34]
                 [DEVICE = device ]
                 [ERRLIM = { error-threshold-count | 100 } ]
                 [LAYOUT = { SHORT | MEDIUM | LONG } ]
                 [NOUSERABEND]
                 [TEST]
```

ADACHK TEMPPRINT: Print/Dump Temporary Data Set

```
ADACHK TEMPPRINT  RABN = { rabn | rabn1 - rabn2 } [ ,{ rabn | rabn1 - rabn2 } ]...
                  [ABEND34]
                  [DEVICE = device ]
                  [ERRLIM = { error-threshold-count | 100 } ]
                  [LAYOUT = { SHORT | MEDIUM | LONG } ]
                  [NOUSERABEND]
                  [TEST]
```

ADACHK UIPRINT: Print/Dump Upper Index

```
ADACHK UIPRINT    [ABEND34]
                  [ERRLIM = { error-threshold-count | 100 } ]
                  [FILE = { file | file1 - file2 [ ,{ file | file1 - file2 } ]... | all-files } ]
                  [LAYOUT = { SHORT | MEDIUM | LONG } ]
                  [NOUSERABEND]
                  [TEST]
```

ADACHK VALIDATE: Validate all Database Files

```
ADACHK  VALIDATE  [ABEND34]
                  [CODE = cipherkey ]
                  [DESCRIPTOR = desc1 [ ,desc2 ] ... ]
                  [ERRLIM = { error-threshold-count | 100 } ]
                  [FILE= { file | file1 - filex | all-files } ]
                  [LAYOUT = { SHORT | MEDIUM | LONG } ]
                  [LWP = { workpoolsize | 10240K } ]
                  [MAXCALLS = { count | [ 200 | ( TOPISN-value/100 ) ] } ]
                  [MAXDESCLEN = length | FDT-largest-descriptor ]
                  [NOSYNC]
                  [NOUSERABEND]
                  [SORTTYPE = { INTERNAL | EXTERNAL } ]
                  [TEST]
                  [UTYPE = { ACC | EXF | EXU } ]
```

ADACHK WORKPRINT: Print/Dump Work Data Set

```
ADACHK WORKPRINT  RABN = { rabn | rabn1 - rabn2 } [ ,{ rabn | rabn1 - rabn2 } ]...
                  [ABEND34]
                  [DEVICE = device ]
                  [ERRLIM = { error-threshold-count | 100 } ]
                  [LAYOUT = { SHORT | MEDIUM | LONG } ]
                  [NOUSERABEND]
                  [TEST]
```

ADACMP COMPRESS: Compress an Adabas File

```
ADACMP  COMPRESS  {field-definition-statements | FDT = file-number}
                  [CODE = cipher-code ]
                  [DATADEVICE = device-type ]
                  [DEVICE = device-type-list ]
                  [FACODE = file-alpha-EBCDIC-key ]
                  [FILE = {file-number | 0 } ]
                  [FWCODE = file-wide-key ]
                  [FUWCODE = wide-key ]
                  [FORMAT = format ]
                  [HEADER = { YES | NO } ]
                  [LOBDEVICE = device-type-list ]
                  [LOBVALUES = { YES | NO } ]
                  [MAXLOGRECLEN = buffer-size ]
                  [MUPECOUNT = 1 | 2 ]
                  [MUPEX]
                  [NOUSERABEND]
                  [NUMREC = number-of-records]
                  [PASSWORD = "password" ]
                  [RECFM = { F | FB | V | VB | U } ]
                        [,LRECL = record-length } ]
                  [SPAN]
                  [TZ = ' timezone-name ' [,DST] ]
                  [ { USERISN | MINISN = { start-isn | 1 } } ]
                  [UACODE = userdata-alpha-key ]
                  [UARC = {userdata-architecture-key | 2 } ]
                  [UWCODE = userdata-wide-key ]
```

ADACMP DECOMPRESS: Decompress Adabas Files

```
ADACMP  DECOMPRESS  [CODE = cipher-code ]
                    [FORMAT = output-record-format-definition ]
                    [HEADER = { YES | NO } ]
                    [INFILE = file-number ]
                       [ETID = owner-id ]
                       [LPB = prefetch-buffer-size ]
                       [PASSWORD = ' password ' ]
                       [SORTSEQ = { descriptor [,NU] | ISN } ]
                       [UTYPE = { EXF | EXU } ]
                    [ISN]
                    [LOBVALUES = { YES | NO } ]
                    [MAXLOGRECLEN = buffer-size ]
                    [NOUSERABEND]
                    [NUMREC = number-of-records ]
                    [TRUNCATE]
                    [TZ = ' timezone-name ' [,DST] ]
                    [UACODE = userdata-alpha-key ]
                    [UARC = {architecture-key |  2 } ]
                    [UWCODE = userdata-wide-key ]
```

Field Definition Statements

The following syntax must be followed when entering field definitions. A minimum of one and a maximum of 3214 definitions may be specified.

Statement Type	Syntax
Field and Group	`FNDEF = 'level, name [ , length, format ] [, MU [(occurrences )] ] [ , option ] ... '`
Periodic Group	`FNDEF = 'level, name [ , PE [( occurrences )] ]'`

Statement Type	Syntax
Collation descriptor	**COLDE = '***number*, *name* **[, UQ [, XI]] =** *parent-field***'**
Hyperdescriptor	**HYPDE = '***number*, *name*, *length*, *format* **[{ ,** *option***} ...] = {** *parent-field* **} , ...'**
Phonetic descriptor	**PHONDE = '** *name* **(***field***)'**
Subdescriptor	**SUBDE = '***name* **[, UQ [, XI]] =** *parent-field* **(***begin*, *end***)'**
Subfield	**SUBFN = '** *name* **=** *parent-field* **(***begin* **,** *end***)'**
Superdescriptor	**SUPDE = '***name* **[, UQ [, XI]] = {***parent-field* **(***begin*, *end* **) } , ...'**
Superfield	**SUPFN = '***name* **=** *parent-field* **(***begin* **,** *end***)[,** *parent-field* **(** *begin* **,** *end* **)]...'**

User comments may be entered to the right of each definition. At least one blank must be present between a definition and any user comments.

ADACNV CONVERT: Convert a Database to Higher Version

```
ADACNV  CONVERT  [IGNPPT]
                 [NOUSERABEND]
                 [PLOGDEV = multiple-PLOG-device-type ]
                 [RESTART]
                 [TEST]
                 [TOVERS = target-version ]
```

ADACNV REVERT: Revert a Database to Lower Version

```
ADACNV  REVERT  [TOVERS = target-version ]
                [IGNPPT]
                [NOUSERABEND]
                [PLOGDEV = multiple-PLOG-device-type ]
                [RESTART]
                [TEST]
```

ADADBS ADD: Add Data Set

```
ADADBS  ADD  { ASSOSIZE = size [ ASSODEV = device-type ] |
               DATASIZE = size [ DATADEV = device-type ] }
             [NOUSERABEND]
             [TEST]
```

ADADBS ADDCLOG: Dynamically Add CLOG Data Sets

```
ADADBS  ADDCLOG  NUMBER = clog-ds-number
                 [NOUSERABEND]
                 [NUCID = nucid ]
                 [CLOGDEV = device-type ]
                 [TEST]
```

ADADBS ADDPLOG: Dynamically Add PLOG Data Sets

```
ADADBS  ADDPLOG  NUMBER = plog-ds-number
                 [NOUSERABEND]
                 [NUCID = nucid ]
                 [PLOGDEV = device-type ]
                 [TEST]
```

ADADBS ALLOCATE: Allocate File Extent

```
ADADBS  ALLOCATE   FILE = file-number
                   { ACSIZE | AC2SIZE | DSSIZE | NISIZE | UISIZE } = size
                   [DEVICE = device-type ]
                   [NOUSERABEND]
                   [PASSWORD = ' password ' ]
                   [STARTRABN = start-rabn ]
                   [TEST]
```

ADADBS CHANGE: Change Standard Length or Format of a Field

```
ADADBS CHANGE FILE = file-number
                     { FNDEF = ' Adabas-field-definition '
                     { FIELD = ' field-name ' { FORMAT=P | LENGTH= new-length | OPTION={ LA | NOUQ [,INPARALLEL=YES|NO] } }
                     [ NOUSERABEND ]
                     [ PASSWORD = ' password ']
                     [TEST]
```

ADADBS CVOLSER: Print Adabas Extents on Given Volume

```
ADADBS  CVOLSER  VOLSER = volume-serial-number
                 [NOUSERABEND]
                 [TEST]
```

ADADBS DEALLOCATE: Deallocate File Extent

```
ADADBS  DEALLOCATE  FILE = file-number
                    { ACSIZE | AC2SIZE | DSSIZE | NISIZE | UISIZE } = size
                    [NOUSERABEND]
                    [PASSWORD = ' password ' ]
                    [STARTRABN = start-rabn ]
                    [TEST]
```

ADADBS DECREASE: Decrease Last Associator or Data Storage Data Set Size

```
ADADBS  DECREASE   { ASSOSIZE | DATASIZE } = sizeB
                   [NOUSERABEND]
                   [TEST]
```

ADADBS DELCLOG: Dynamically Delete CLOG Data Sets

```
ADADBS  DELCLOG  NUMBER = clog-ds-number
                 [NOUSERABEND]
                 [NUCID = nucid ]
                 [TEST]
```

ADADBS DELCP: Delete Checkpoint Records

```
ADADBS  DELCP  TODATE = yyyymmdd
               [NOUSERABEND]
               [TEST]
```

ADADBS DELDE: Logically Delete a Descriptor

```
ADADBS  DELDE  FILE = file-number
               DESCRIPTOR = descriptor-name
               [NOUSERABEND]
               [PASSWORD = password ]
               [TEST]
```

ADADBS DELETE: Delete File

```
ADADBS  DELETE  { FILE = fnr  [KEEPFDT] [PASSWORD = 'password' ] }
                [NOUSERABEND]
                [TEST]
```

ADADBS DELFN: Logically Delete Fields

```
ADADBS DELFN   FILE = file-number
               FIELDLIST = ' field-list '
               [PASSWORD = password ]
               [NOUSERABEND]
               [TEST]
```

ADADBS DELPLOG: Dynamically Delete PLOG Data Sets

```
ADADBS  DELPLOG  NUMBER = plog-ds-number
                 [NOUSERABEND]
                 [NUCID = nucid ]
                 [TEST]
```

ADADBS DEVENTLOG: Display Adabas Event Log

```
ADADBS DEVENTLOG [NOUSERABEND]
                 [NUCID = nucid ]
                 [TEST]
```

ADADBS DSREUSE: Reuse Data Storage Blocks

```
ADADBS  DSREUSE  FILE = file-number
                 MODE = { ON | OFF [,INPARALLEL=YES|NO]}
                 [NOUSERABEND]
                 [PASSWORD = 'password ' ]
                 [RESET]
                 [TEST]
```

ADADBS ENCODEF: Change File Encoding

```
ADADBS  ENCODEF   FILE = file-number
                  FACODE =  alpha-key | UWCODE = wide-key
                  [NOUSERABEND]
                  [TEST]
```

ADADBS EXPFILE: Insert or Remove Files in Expanded File Chains

```
ADADBS EXPFILE  FILE = file-number
                { INSERT | REMOVE }
                ANCHOR = file-number
                [PASSWORD = password ]
                [NOUSERABEND]
                [TEST]
```

ADADBS INCREASE: Increase Last Associator or Data Storage Data Set Size

```
ADADBS  INCREASE  { ASSOSIZE | DATASIZE } = size
                  [ NOUSERABEND ]
                  [TEST]
```

ADADBS ISNREUSE: Reuse ISNs

```
ADADBS  ISNREUSE  FILE = file-number
                  MODE = { ON | OFF [,INPARALLEL=YES|NO]}
                  [NOUSERABEND]
                  [PASSWORD = 'password ' ]
                  [RESET]
                  [SETISN=isn]
                  [TEST]
```

ADADBS MODFCB: Modify File Parameters

```
ADADBS MODFCB  FILE = file-number
               [ASSOPFAC = new-padding-factor ]
               [DATAPFAC = new-padding-factor ]
               [FILEREADONLY = { YES | NO } ]
               [INPARALLEL={ YES|NO }]
               [LOBFILE = file-number ]
               [MAXDS = maximum-secondary-allocation ]
               [MAXNI = maximum-secondary-allocation ]
               [MAXUI = maximum-secondary-allocation ]
               [MAXRECL = maximum-compressed-record-length ]
               [NOUSERABEND]
               [PASSWORD = ' password ' ]
               [PGMREFRESH = { YES | NO } ]
               [RPLUPDATEONLY = {YES | NO} ]
               [SYFMAXUV = nn ]
               [TEST]
```

ADADBS MUPEX: Set Maximum Count for MU and PE Fields

```
ADADBS  MUPEX  FILE = file-number
               MUPECOUNT = { 1 | 2 }
               [PASSWORD = 'password' ]
               [NOUSERABEND]
               [TEST]
```

ADADBS NEWFIELD: Add New Field

```
ADADBS  NEWFIELD  FILE = file-number
                  [FNDEF = 'Adabas-field-definition' ]
                  [INPARALLEL={ YES|NO }]
                  [NOUSERABEND]
                  [PASSWORD = 'password' ]
                  [SUBFN = 'name  = parent-field ( begin , end )' ]
                  [SUPFN = 'name  = { parent-field ( begin, end ) } ...' ]
                  [TEST]
```

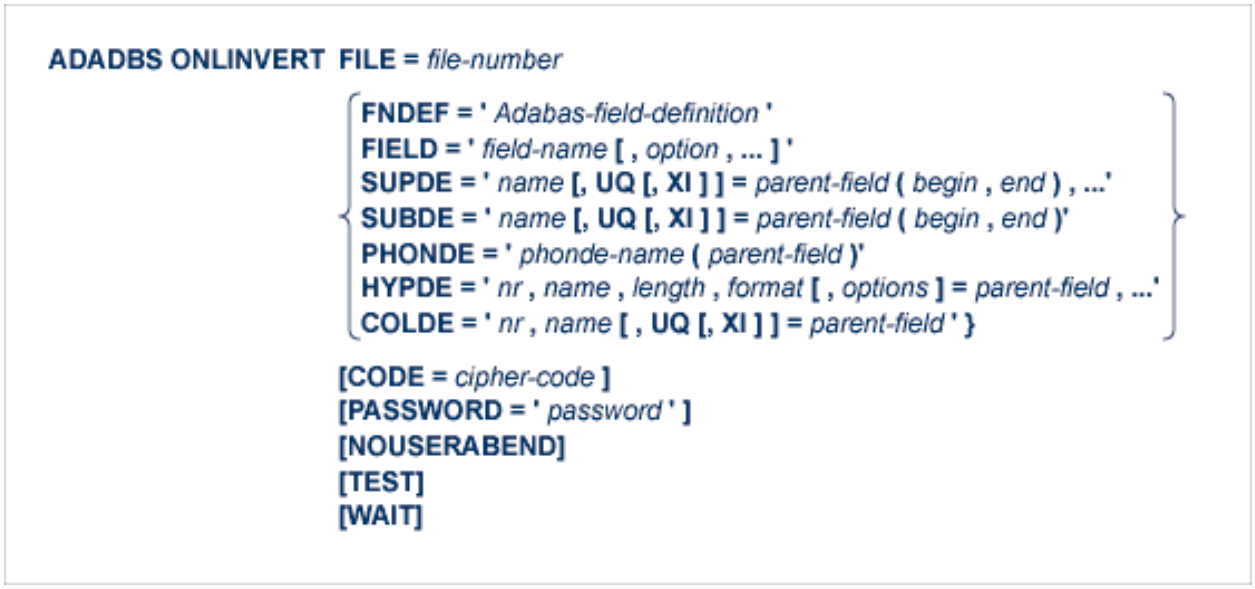
ADADBS ONLADD: Dynamically Add an ASSO or DATA Data Set

```
ADADBS ONLADD  { ASSOSIZE= nnnnn [,ASSODEV= device ] }
               { DATASIZE= nnnnn [,DATADEV= device ] }
               [NOUSERABEND]
               [TEST]
```

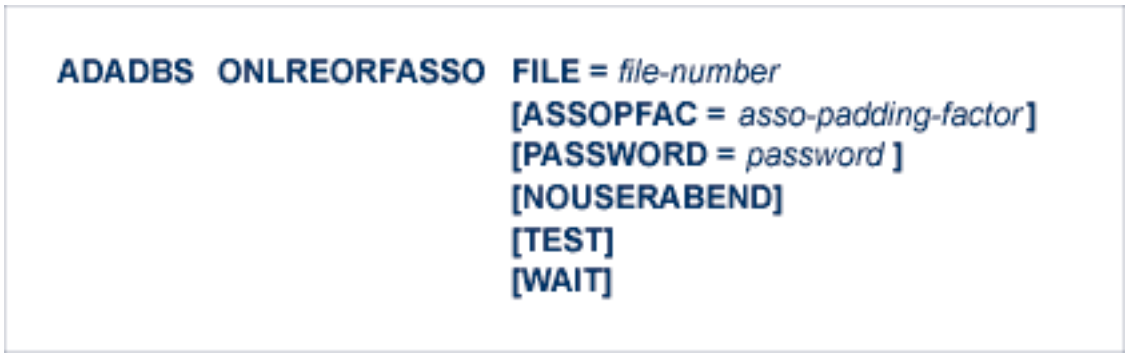
ADADBS ONLINCREASE: Dynamically Increase the Last Existing ASSO or DATA Data Set

```
ADADBS ONLINCREASE  {ASSOSIZE|DATASIZE}= nnnnn
                    [NOUSERABEND]
                    [TEST]
```

ADADBS ONLINVERT: Start Online Invert Process



ADADBS ONLREORFASSO: Start Online Reorder Associator for Files



ADADBS ONLREORFDATA: Start Online Reorder Data for Files

```
ADADBS  ONLREORFDATA   FILE = file-number
                       [DATAPFAC =  data-padding-factor ]
                       [SORTSEQ = { ISN | de-name } ]
                       [PASSWORD = password ]
                       [NOUSERABEND]
                       [TEST]
                       [WAIT]
```

ADADBS ONLREORFILE: Start Online Reorder Associator and Data for Files

```
ADADBS  ONLREORFILE    FILE = file-number
                       [ASSOPFAC = asso-padding-factor]
                       [DATAPFAC =  data-padding-factor ]
                       [SORTSEQ = { ISN | de-name } ]
                       [PASSWORD = password ]
                       [NOUSERABEND]
                       [TEST]
                       [WAIT]
```

ADADBS OPERCOM: Issue Adabas Operator Commands

```
ADADBS  OPERCOM  operator-command
                 [NOUSERABEND]
                 [NUCID = {nuc-id | 0 } ]
                 [TEST]
```

Operator Commands Supported by ADADBS OPERCOM

The following Adabas operator commands can be used in the ADADBS OPERCOM utility function:

ADAEND Command

This command terminates an 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.

In nucleus cluster environments, the GLOBAL option can be used to terminate the Adabas session in all active cluster nuclei.

ALOCKF Command

Lock a file in advance to ensure that an EXU, EXF, or UTI user will have exclusive control of the specified file. The advance-lock prevents new transactions from using the file. Once all current users have stopped using the file, the exclusive-control user has the lock. Until then, the exclusive-control user must wait.

To remove the advance lock without running the utility, see the RALOCKF command.

This command is not available in single user mode or for a read-only nucleus. It is available in cluster and non-cluster environments.

The following key points should be noted about advance-locks on files:

1. An advance-lock can be set while a file is being used.
2. A command requesting exclusive control (UTI, EXF, or EXU) over an advance-locked file will wait in the command queue until all other users stop using the file before it starts processing the file.
3. Advance-locks are automatically removed when a user gets exclusive control over the file. However, if a file is locked (via the LOCKF, LOCKU, or LOCKX commands), the locks are not removed when a user gets exclusive control over the file. (Locks must be explicitly removed, whereas advance-locks are automatically removed.)

4. Adabas will reject an advance-lock on a file that is already locked (via the LOCKF, LOCKU, LOCKX or ALOCKF commands) but will accept a lock request on an advance-locked file.
5. To ensure you have uninterrupted exclusive control over a file in a situation where you have multiple steps to run that require uninterrupted exclusive control while all steps have been processed, use a combination of advance-locking the file (ALOCKF), stopping all users of the file (STOPF), and locking the file (LOCKU). An example of this is given later in this section.
6. In the case of expanded files, an ALOCKF command is applied to the anchor file (representing the entire expanded file chain).
7. In a cluster environment, advance-locks are effective in all nuclei of the cluster.

Simple Example

In the following example, issuing the ALOCKF request to advance-lock file 32 ensures that file 32 will be available so the ADALOD UPDATE function can take exclusive control (via a UTI request) of the file for its processing:

```
ADADBS OPERCOM ALOCKF=32
ADALOD UPDATE FILE=32
```

Adabas processing proceeds in the following manner for these utility functions:

1. When the ADADBS OPERCOM ALOCKF request is submitted, file 32 is marked as advance-locked.
2. If there are any active users of file 32, the ADALOD UTI request cannot be granted immediately and will wait for the active users to end their transactions or sessions. Active users continue to issue commands against file 32. However, requests by new users for file 32 are rejected because of the advance-lock on the file.
3. When all active users of file 32 have ended their transactions or sessions, the ADALOD UTI request for exclusive control can be granted. Once exclusive control is established, ADALOD UPDATE processing can occur.

   As part of the successful execution of the ADALOD UTI request, the advance-lock is removed from the file. However, because ADALOD processing now has exclusive control of file 32, other users still cannot access it.

To accelerate the process and limit the wait time for the ADALOD UTI request, you can simply stop all active users of the file by force using the STOPF operator command:

```
ADADBS OPERCOM ALOCKF=32
ADADBS OPERCOM STOPF=32
ADALOD UPDATE FILE=32
```

In this case, the STOPF command will cause the nucleus to back out and stop users of file 32 before the ADALOD UTI request is granted. In addition, the advance-lock request specified

by the ALOCKF command will prevent new users from accessing the file until the ADALOD UTI request for exclusive control is processed.

More Complex Example

An advance-lock set by ALOCKF cannot guarantee that multiple job steps in a series get uninterrupted exclusive control over a file, as the advance-lock is removed when the first step obtains exclusive control. Suppose an installation wants to run the following utility sequence:

```
ADAULD UNLOAD FILE=45
ADADBS REFRESH FILE=45
ADALOD UPDATE FILE=45
```

An ALOCKF request to advance-lock file 45 in this case would only work for the ADAULD UNLOAD function, because the ADAULD EXU request for exclusive control of file 45 would remove the advance-lock. If there are active users who try to issue commands against file 45, there is a chance that one of them will execute a command between the UNLOAD and REFRESH steps, or between the REFRESH and UPDATE steps. Such a user may also prevent the REFRESH or UPDATE step from obtaining exclusive control of file 45.

To ensure you have uninterrupted exclusive control over the file in this situation, use a combination of advance-locking the file (ALOCKF), stopping all users of the file (STOPF), and locking the file (LOCKU):

```
ADADBS OPERCOM ALOCKF=45
ADADBS OPERCOM STOPF=45
ADADBS OPERCOM LOCKU=45
ADAULD UNLOAD FILE=45
ADADBS REFRESH FILE=45
ADALOD UPDATE FILE=45
ADADBS OPERCOM UNLOCKU=45
```

In this example, Adabas processing proceeds in the following manner:

1. When the ADADBS OPERCOM ALOCKF request is submitted, file 45 is marked as advance-locked.

   The ADADBS OPERCOM STOPF request causes the nucleus to back out and stop users of file 45. (This step is optional.)

   The ADADBS OPERCOM LOCKU request locks the file more permanently than the ALOCKF request since the LOCKU lock will stay in effect until it is explicitly released.
2. If there are any active users updating file 45, the ADAULD EXU request cannot be granted immediately and will wait for the update users to end their transactions or sessions. Active users may continue to issue commands against file 45. However, requests by new users for file 45 are rejected because of the advance-lock on the file.

3. When all active users of file 45 have ended their transactions or sessions, the ADAULD request for exclusive-update (EXU) control can be granted. Once exclusive-update control is established, ADAULD UNLOAD processing can occur.

   As part of the successful execution of the ADAULD EXU request, the advance-lock is removed from the file. When ADAULD completes processing, it releases the EXU control of file 45. However, during and after the ADAULD execution, the LOCKU lock ensures that other users still cannot access the file.
4. The ADADBS utility will issue a UTI request for exclusive control of file 45, which will be granted. ADADBS REFRESH processing will then occur. When it completes, ADADBS will release exclusive control of file 45. However, the LOCKU lock ensures that other users still cannot access it.
5. The ADALOD utility will issue a UTI request for exclusive control of file 45, which will be granted. ADALOD UPDATE processing will then occur. When it completes, ADALOD will release exclusive control of file 45. However, the LOCKU lock ensures that other users still cannot access it.
6. The ADADBS OPERCOM UNLOCKU request explicitly unlocks file 45, making it available for other users.

ASSOSPACEWARN Command

ASSOSPACEWARN=*threshold1*[,*inc1*[,*threshold2*[,*inc2*[,*threshold3*[,*inc3*]]]]]

Use the `ASSOSPACEWARN` command to modify the setting of the `ASSOSPACEWARN` ADARUN parameter while the database is running. ASSOSPACEWARN specifies up to three pairs of threshold percentages and percentage change increments, expressed as percentages of the total Associator (ASSO) portion of the database. When ASSO space use reaches a specified threshold percentage, a space usage message is issued. In addition, when the ASSO space use changes by the increment specified for that threshold, additional space usage messages are issued.

Note: For the purposes of database space notifications, the space used in the Adabas database comprises all database blocks that have been assigned either to some common purpose (for example, DSST, PPT, DLOG area) or to a file in the database. Only space listed in the free space table (FST) is not calculated as used. In particular, free space allocated for some file but not yet used is calculated as used.

The following specifications can be made in the ASSOSPACEWARN command:

Parameter	Description
threshold#	A threshold, expressed as a percentage of the total Associator portion of the database. When ASSO space use exceeds or falls below any of the thresholds set, a space usage message is issued. The default is zero (0). If zero is specified for the first threshold setting, no space messages are issued. When more than one threshold is specified, the second threshold specification must be greater than the first. Likewise, the third threshold specification (if made) must be greater than the second.
inc#	An increment percentage, expressed as a percentage of the total ASSO portion of the database. When ASSO space use changes (increases or decreases) from the associated threshold by the amount given in this increment percentage, another space usage message is issued. The default is five percent (5).

Up to three threshold-increment pairs can be specified.

AUDCONNECT Command

```
ADADBS OPERCOM AUDCONNECT = { dbid | ALL }
```

Use this command to dynamically force a connection attempt to either a specific Auditing Server or Adabas database ID, or to all related Auditing Server or Adabas database IDs.

One of the parameters of the AUDCONNECT command must be specified. There is no default. The parameters are described in the following table:

Parameter	Description
ALL	Forces a reconnection attempt with ALL known Auditing Server or Adabas database IDs.
dbid	The specified Auditing Server or Adabas database ID.

AUDITLOG Command

```
AUDITLOG = {CONSOLE}
```

Use the `AUDITLOG` command to modify the setting of the AUDITLOG ADARUN parameter while the database is running. Valid option is "CONSOLE". Once AUDITLOG has been activated with "CONSOLE", it cannot be changed to "NO" without cycling the nucleus.

In the following example, issuing the AUDITLOG requests activates the AUDITLOG to start writing all utility, and AOS audit data to the console.

```
ADADBS OPERCOM AUDITLOG=CONSOLE
```

AUTOINCASSOSIZE Command

Use the `AUTOINCASSOSIZE` command to modify the setting of the `AUTOINCASSOSIZE` ADARUN parameter while the database is running. AUTOINCASSOSIZE specifies the size, in cylinders or blocks, by which the highest-numbered (last-defined) Associator (ASSO) data set will be increased by an automatic database increase process.

This parameter only has an effect if the AUTOINCASSOTHRESHOLD setting has a non-zero value. A numeric value followed by the letter B indicates the value specifies a number of blocks, which is then rounded up to the next highest amount that fills the final track or other platform-dependent minimum space allocation unit. A numeric value without the suffix B indicates the increment is in cylinders.

If an automatic database increase process is started to increase the ASSO component of the database, the last ASSO container data set will be increased by the number of cylinders or blocks specified by AUTOINCASSOSIZE. (The number of cylinders or blocks added may be less, however, if the limit set by the AUTOINCASSOTOTAL parameter is reached.)

If the last ASSO container data set cannot be increased by the specified size, but only by a lesser amount, the automatic increase process will increase the data set by the amount of space that it can get. Note that one data set can span at most 59 volumes with up to 16 extents on each volume. When these limits are reached, the database should be increased manually by adding a new container data set with the ADADBS ONLADD utility function.

When 4-byte RABNs are used, valid values for this parameter range from zero (0) to 2147483647 cylinders or from zero (0) to 2147483647B blocks. When 3-byte RABNs are used, the limits range from zero (0) to 16775215 blocks or the equivalent in cylinders. A value of "0" or "0B" means that no automatic increase will be performed for ASSO space. The default value for this parameter is zero, which functionally disables auto-increase for ASSO space.

If AUTOINCASSOSIZE is set to a small value, the automatic database increase process may be initiated multiple times and cause the container allocation to reach platform-dependent limits on extents and volumes. Once that occurs, there can be no more auto-increases until the container allocations are consolidated, which requires stopping all nuclei using the container. Alternatively, a manual increase can be used to add another container without stopping the Adabas nucleus.

AUTOINCASSOTHRESHOLD Command

Use the AUTOINCASSOTHRESHOLD command to modify the setting of the AUTOINCASSOTHRESHOLD ADARUN parameter while the database is running. AUTOINCASSOTHRESHOLD specifies the Associator space threshold at which Adabas automatically initiates a database increase process. This threshold is expressed as a percentage of used Associator (ASSO) space to total Associator space available in the database, ASSO space is considered used if it is not listed as free in the Free Space Table (FST).

If the used Associator space exceeds the percentage defined by the specified AUTOINCASSO-THRESHOLD setting, Adabas automatically initiates a database increase process for ASSO space.

Note that the database increase process may take some time, the length of which is related to the size by which the database is increased (the value of the AUTOINCASSOSIZE setting). The AUTOINCASSOTHRESHOLD setting should be configured so that the increase process is given sufficient time to complete before the database fills up, assuming a reasonable space consumption rate.

Once a database increase process has been initiated, another automatic increase for ASSO space may be started only after the first process has finished and the ASSO space usage again or still exceeds the specified threshold.

Valid values for this command are either zero (0) or integers ranging from 50 through 100. A value of zero means that no automatic increase will be performed for ASSO space. A value of 100 means that an automatic increase process will be initiated only when the ASSO space grows full (i.e., no free space is left at all). The default value is zero, which functionally disables auto-increase processes for ASSO space.

AUTOINCASSOTOTAL Command

Use the AUTOINCASSOTOTAL command to modify the setting of the AUTOINCASSOTOTAL ADARUN parameter while the database is running. AUTOINCASSOTOTAL specifies the maximum total size, in cylinders or blocks, of the entire Associator space of the database that is not to be exceeded by automatic database increase processes.

A numeric value followed by the letter B indicates the value specifies a number of blocks, which is then rounded up to the next highest amount that fills the final track or other platform-dependent minimum space allocation unit. A numeric value without a suffix B indicates the increment is in cylinders.

An automatic database increase process for ASSO space will not exceed the size specified by the AUTOINCASSOTOTAL setting. This setting can be used to limit the total amount of disk space used for the database, in order to protect the disk space remaining available for other databases and other users of the system. Note that this setting limits only automatic increases by Adabas; it does not limit increasing the database manually using the ADADBS ADD, INCREASE, ONLADD or ONLINCREASE utility functions.

AUTOINCASSOTOTAL specifies the number of cylinders or blocks beyond which automatic database increase processes will not extend the ASSO space of the database. If the AUTOINCASSOTOTAL setting is less than the current number of cylinders in the ASSO space plus the AUTOINCASSOSIZE value, an automatic increase will increase the ASSO space only by the difference between the AUTOINCASSOTOTAL value and the current size – that is, by less than the increase requested by the AUTOINCASSOSIZE setting. If AUTOINCASSOTOTAL is not greater than the current number of cylinders in ASSO, no further automatic increases will be performed for ASSO space.

When 4-byte RABNs are used, valid values for this parameter range from zero (0) to 2147483647 cylinders or from zero (0) to 2147483647B blocks. When 3-byte RABNs are used, the limits range from zero (0) to 16775215 blocks or the equivalent in cylinders. A value of "0" or "0B" means that no automatic increase will be performed for ASSO space. The default value for this parameter is zero, which functionally disables auto-increase for ASSO space.

The total size of ASSO space may be constrained to less than the AUTOINCASSOTOTAL value for either of the following reasons.

- There may not be enough storage resources to extend to the specified limit.
- When using 4-byte RABNs, a component can have at most 2147483647 blocks, and for 3-byte RABNs the limit is 16777215 blocks.

AUTOINCDATASIZE Command

Use the `AUTOINCDATASIZE` command to modify the setting of the `AUTOINCDATASIZE` ADARUN parameter while the database is running. AUTOINCDATASIZE specifies the size, in cylinders or blocks, by which the highest-numbered (last-defined) Data Storage (DATA) data set will be increased by an automatic database increase process.

This parameter only has an effect if the AUTOINCDATATHRESHOLD has a non-zero value. A numeric value followed by the letter B indicates the value specifies a number of blocks, which is then rounded up to the next highest amount that fills the final track or other platform-dependent minimum space allocation unit. A numeric value without the suffix B indicates the increment is in cylinders.

If an automatic database increase process is started to increase the DATA component of the database, the last DATA container data set will be increased by the number of cylinders or blocks specified by AUTOINCDATASIZE. (The number of cylinders or blocks added may be less, however, if the limit set by the AUTOINCDATATOTAL parameter is reached.)

If the last ASSO container data set cannot be increased by the specified size, but only by a lesser amount, the automatic increase process will increase the data set by the amount of space that it can get. Note that one data set can span at most 59 volumes with up to 16 extents on each volume. When these limits are reached, the database should be increased manually by adding a new container data set with the ADADBS ONLADD utility function.

When 4-byte RABNs are used, valid values for this parameter range from zero (0) to 2147483647 cylinders or from zero (0) to 2147483647B blocks. When 3-byte RABNs are used, the limits range from zero (0) to 16775215 blocks or the equivalent in cylinders. A value of "0" or "0B" means that no automatic increase will be performed for DATA space. The default value for this parameter is zero, which functionally disables auto-increase for DATA space.

If AUTOINCDATASIZE is set to a small value, the automatic database increase process may be initiated multiple times and cause the container allocation to reach platform-dependent limits on extents and volumes. Once that occurs, there can be no more auto-increases until the container allocations are consolidated, which requires stopping all nuclei using the container. Alternatively, a manual increase can be used to add another container without stopping the Adabas nucleus.

AUTOINCDATATHRESHOLD Command

Use the `AUTOINCDATATHRESHOLD` command to modify the setting of the `AUTOINCDATATHRESHOLD` ADARUN parameter while the database is running. AUTOINCDATATHRESHOLD specifies the Data Storage space threshold at which Adabas automatically initiates a database increase process. This threshold is expressed as a percentage of used Data Storage space to total Data Storage space available in the database. DATA space is considered used if it is not listed as free in the Free Space Table (FST).

If the used Data Storage space exceeds the percentage defined by the specified AUTOINCDATATHRESHOLD setting, Adabas automatically initiates a database increase process for DATA space.

Note that the database increase process may take some time, the length of which is related to the size by which the database is increased (the value of the AUTOINCDATASIZE setting). The AUTOINCDATATHRESHOLD setting should be configured so that the increase process is given sufficient time to complete before the database fills up, assuming a reasonable space consumption rate.

Once a database increase process has been initiated, another automatic increase for DATA space may be started only after the first process has finished and the DATA space usage again or still exceeds the specified threshold.

Valid values for this command are either zero (0) or integers ranging from 50 through 100. A value of zero means that no automatic increase will be performed for DATA space. A value of 100 means that an automatic increase process will be initiated only when the DATA space grows full (i.e., no free space is left at all). The default value is zero, which functionally disables auto-increase processes for DATA space.

AUTOINCDATATOTAL Command

Use the `AUTOINCDATATOTAL` command to modify the setting of the `AUTOINCDATATOTAL` ADARUN parameter while the database is running. AUTOINCDATATOTAL specifies the maximum total size, in cylinders or blocks, of the entire Data Storage space of the database that is not to be exceeded by automatic database increase processes.

A numeric value followed by the letter B indicates the value specifies a number of blocks, which is then rounded up to the next highest amount that fills the final track or other platform-dependent minimum space allocation unit. A numeric value without a suffix B indicates the increment is in cylinders.

An automatic database increase process for DATA space will not exceed the size specified by the AUTOINCDATATOTAL setting. This setting can be used to limit the total amount of disk space used for the database, in order to protect the disk space remaining available for other databases and other users of the system. Note that this setting limits only automatic increases by Adabas; it does not limit increasing the database manually using the ADADBS ADD, INCREASE, ONLADD or ONLINCREASE utility functions.

AUTOINCDATATOTAL specifies the number of cylinders or blocks beyond which automatic database increase processes will not extend the DATA space of the database. If

AUTOINCDATATOTAL setting is less than the current DATA size plus the AUTOINCDATASIZE value, an automatic increase will increase the DATA space only by the difference between the AUTOINCDATATOTAL value and the current size – that is, by less than the increase requested by the AUTOINCDATASIZE setting. If the AUTOINCDATATOTAL setting is not greater than the current DATA size, no further automatic increases will be performed for DATA space.

When 4-byte RABNs are used, valid values for this parameter range from from zero (0) to 2147483647 blocks or the equivalent in cylinders. When 3-byte RABNs are used, the limits range from zero (0) to 16775215 blocks or the equivalent in cylinders. A value of "0" or "0B" means that no automatic increase will be performed for DATA space. The default value for this parameter is zero, which functionally disables auto-increase for DATA space.

The total size of DATA space may be constrained to less than the AUTOINCDATATOTAL value for either of the following reasons.

- There may not be enough storage resources to extend to the specified limit.
- When using 4-byte RABNs, a component can have at most 2147483647 blocks, and for 3-byte RABNs the limit is 16777215 blocks.

CANCEL Command

```
CANCEL [, GLOBAL ]
```

Cancel 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.

In nucleus cluster environments, the GLOBAL option can be used to cancel the Adabas session in all active cluster nuclei.

CLOGMRG Command

```
CLOGMRG = { YES | NO }
```

Switches automatic command log merging (ADARUN CLOGMRG parameter value) on or off in nucleus cluster environments.

The CLOGMRG command is global by definition and affects all nuclei in the cluster. If a NUCID is specified, it is ignored.

CLUFREEUSER Command

```
CLUFREEUSER  [,TNA= max-time ][,UID = userid ][,FORCE][,GLOBAL]
```

Note: The `CLUFREEUSER` command is only valid in cluster environments. It can be issued against the local nucleus only or, with the GLOBAL option, against all active and inactive nuclei in the cluster.

Use the `CLUFREEUSER` command to delete leftover cluster user table elements (UTEs or PLX-USERs) in common storage that are no longer associated with user queue elements (UQEs) in a nucleus.

Parameter	Is...
TNA	TNA specifies a decimal number specifying the timeout value in seconds (*max-time*). PLXUSERs that are not used during the time specified may be deleted if other conditions are fulfilled. If TNA= is not specified, PLXUSERs may be deleted without regard to their recent use.
UID	UID specifies a character string or hexadecimal byte string format user ID (*userid*) as follows: ■ *cccccccc* where the argument is 1-8 letters, digits, or embedded '-' signs without surrounding apostrophes. ■ *'cccccccc'* ↩ where the argument is 1-8 characters with surrounding apostrophes. A character string must be enclosed in apostrophes if it contains characters other than letter, digits, or embedded '-' signs. If a specified character string is less than eight characters long, it is implicitly padded with blanks. If the last eight bytes of a user's 28-byte communication ID match a specific user ID, that user's PLXUSER may be deleted if other conditions are fulfilled. If UID is not specified, PLXUSERs may be deleted regardless of their user IDs.
FORCE	FORCE indicates that leftover PLXUSERs are to be deleted even if the users are due a response code 9 (ADARSP009), subcode 20. If FORCE is not specified, such PLXUSERs are not deleted. Before using the FORCE parameter, ensure that the users owning the PLXUSERs to be deleted will not expect any of their transactions to remain open.
GLOBAL	GLOBAL indicates that leftover PLXUSERs throughout the Adabas cluster are to be deleted if they are no longer associated with UQEs and are eligible according to the other specified parameters. Additionally and subject to the other rules, leftover PLXUSERs are deleted if their assigned nuclei have terminated since their last use. If GLOBAL is not specified, only PLXUSERs assigned to the local nucleus and used since the nucleus start are eligible for deletion.

CLUPUBLPROT Command

```
CLUPUBLPROT={YES | NO}
```

Use the `CLUPUBLPROT` command to dynamically modify the setting of the ADARUN CLUPUBLPROT parameter. For more information, read CLUPUBLPROT Parameter: Publishing of Protection Data.

The CLUPUBLPROT command is only valid in cluster environments. It is global by definition and affects all nuclei in the cluster. If a NUCID is specified, it is ignored.

CT Command

```
CT = timeout-limit
```

Dynamically override the ADARUN CT parameter value; that is, the maximum number of seconds that can elapse from the time an Adabas command has been completed until the results are returned to the user through interregion communication (which depends on the particular operating system being used). The minimum setting is 1; the maximum is 16777215.

In nucleus cluster environments, the CT command is global by definition and affects all nuclei in the cluster. If a NUCID is specified, it is ignored.

DATASPACEWARN Command

```
DATASPACEWARN=threshold1[,inc1[,threshold2[,inc2[,threshold3[,inc3]]]]]
```

Use the `DATASPACEWARN` command to modify the setting of the `DATASPACEWARN` ADARUN parameter while the database is running. DATASPACEWARN specifies up to three pairs of threshold percentages and percentage change increments, expressed as percentages of the total Data Storage (DATA) portion of the database. When Data Storage space use reaches a specified threshold percentage, a space usage message is issued. In addition, when the Data Storage space use changes by the increment specified for that threshold, additional space usage messages are issued.

Note: For the purposes of database space notifications, the space used in the Adabas database comprises all database blocks that have been assigned either to some common purpose (for example, DSST, PPT, DLOG area) or to a file in the database. Only space

listed in the free space table (FST) is not calculated as used. In particular, free space allocated for some file but not yet used is calculated as used.

The following specifications can be made in the DATASPACEWARN command:

Parameter	Description
threshold#	A threshold, expressed as a percentage of the total Data Storage (DATA) portion of the database. When DATA space use exceeds or falls below any of the thresholds set, a space usage message is issued. The default is zero (0). If zero is specified for the first threshold setting, no space messages are issued. When more than one threshold is specified, the second threshold specification must be greater than the first. Likewise, the third threshold specification (if made) must be greater than the second.
inc#	An increment percentage, expressed as a percentage of the total DATA portion of the database. When DATA space use changes (increases or decreases) from the associated threshold by the amount given in this increment percentage, another space usage message is issued. The default is five percent (5).

Up to three threshold-increment pairs can be specified.

DAUQ Command

Display the user queue element (UQE) of each user who has executed at least one Adabas command within the last 15 minutes. Up to 100 user queue elements will be displayed.

In nucleus cluster environments, the NUCID=0 option can be used to display information for all active cluster nuclei. Information is displayed for each nucleus, one after the other.

DCMDSTAT Command

Display statistics about the usage distribution of commands by command type.

Here is sample output from the DCMDSTAT operator command when run using the ADADBS OPERCOM utility function:

```
ADADBS OPERCOM DCMDSTAT

Type              Commands
 --------------------------
 A1/4               527,017
 CL                       3
 ET                      28
 HI                 528,086
 L2/5            20,784,748
 L3/6             9,977,842
 N1/2                   282
 OP                       3
 UC                       3
 REST                     1
 --------------------------
 Total           31,818,013
```

DCQ Command

Display all posted command queue elements (CQEs). Each CQE's user ID, job name, and buffer length is displayed.

In nucleus cluster environments, the NUCID=0 option can be used to display information for all active cluster nuclei. Information is displayed for each nucleus, one after the other. Here is sample output from the DCQ operator command run using the ADADBS OPERCOM utility function:

```
User/Terminal-ID  Jobname   SECUID    Time      Status  Cmd  File   Length
 ------------------------------------------------------------------------
 'Z007Z007'        ABCTPCTA  ABC       13:36:14  Done    L3     27     1664
 'Z019Z019'        ABCTPCTA  ABC       13:36:14  Ready   A1     21     1388
 C90060C839F60000  ABCDCQ    ABC       13:36:14  Active  LA      0      720
```

DDIB Command

Display data integrity block (DIB). This block contains entries indicating which Adabas utilities are active and the resources being used by each utility. The DDIB function can be performed with either an active or an inactive nucleus.

In nucleus cluster environments, the information displayed by the DDIB command is global; the command can be run on any nucleus.

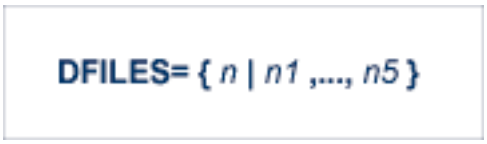
DDSF Command

Display Adabas Delta Save Facility Facility (DSF) status. The Adabas nucleus displays the DSF status on the operator console as well as in the ADADBS job protocol.

This function is only available if the nucleus is run with the parameter ADARUN DSF=YES.

In nucleus cluster environments, the information displayed by the DDSF command is global; the command can be run on any nucleus.

DFILES Command



Displays the number of access, update, EXU, and UTI users for the specified files. User types are totaled for each file, and are listed by file. Up to five files can be specified in this command. Up to 798 users are displayed.

In nucleus cluster environments, the NUCID=0 option can be used to display information for all active cluster nuclei. Information is displayed for each nucleus, one after the other. Here is sample output from the DFILES operator command run using the ADADBS OPERCOM utility function:

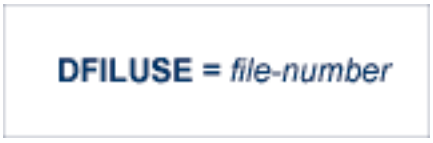
```
      U E    U      A
      T X     P      C
File  I U      D      C    User   User/Terminal-ID Jobname  SECUID   ETID
-------------------------------------------------------------------------
  11  1 0      1      1  00008ACB C9108B278FF52000 ABCLOD   ABC

  12  0 1      0      1  00008BF3 C9108CF0F4E09000 ABC      ABC

  23  0 0     14     17  00008EC7 'Z001Z001'       ABCTPCTA ABC      Z01-ETID
                         00008EC8 'Z002Z002'       ABCTPCTA ABC      Z02-ETID
                         00008EC9 'Z003Z003'       ABCTPCTA ABC      Z03-ETID
                         00008ECA 'Z004Z004'       ABCTPCTA ABC      Z04-ETID
                         00008ECB 'Z005Z005'       ABCTPCTA ABC      Z05-ETID
                         00008ECC 'Z006Z006'       ABCTPCTA ABC      Z06-ETID
                         00008ECE 'Z007Z007'       ABCTPCTA ABC      Z07-ETID
```

```
                        00008ECF 'Z008Z008'       ABCTPCTA ABC      Z08-ETID
                        00008ED0 'Z009Z009'       ABCTPCTA ABC      Z09-ETID
                        00008ED1 'Z010Z010'       ABCTPCTA ABC      Z10-ETID
                        00008ED2 'Z011Z011'       ABCTPCTA ABC      Z11-ETID
                        00008ED3 'Z012Z012'       ABCTPCTA ABC      Z12-ETID
                        00008ED5 'Z013Z013'       ABCTPCTA ABC      Z13-ETID
                        00008ED8 'Z014Z014'       ABCTPCTA ABC      Z14-ETID
                        00008ED9 'Z015Z015'       ABCTPCTA ABC      Z15-ETID
                        00008EDA 'Z016Z016'       ABCTPCTA ABC      Z16-ETID
                        00008EDB 'Z017Z017'       ABCTPCTA ABC      Z17-ETID
```

DFILESTAT Command

Display statistics for the number of commands by file.

DFILUSE Command



Displays the count of commands processed for the specified file so far during the current session.

In nucleus cluster environments, the NUCID=0 option can be used to display information for all active cluster nuclei. Information is displayed for each nucleus, one after the other.

DHQA Command

Display all hold queue elements (HQEs) and all users of each element.

Here is sample output from the DHQA operator command run using the ADADBS OPERCOM utility function:

```
File        ISN  Mode    User   User/Terminal-ID  Jobname   SECUID   ETID
-------------------------------------------------------------------------
  10          1  SHR   000072A1 'U001U001'        ABCTXG    ABC
                 SHR   000072A2 'U002U002'        ABCTXG    ABC
                 SHR   000072A3 'U003U003'        ABCTXG    ABC
                 SHR   000072A4 'U004U004'        ABCTXG    ABC
                 SHR   000072A5 'U005U005'        ABCTXG    ABC
                 SHR   000072A6 'U006U006'        ABCTXG    ABC
                 SHR   000072A7 'U007U007'        ABCTXG    ABC
                 SHR   000072A8 'U008U008'        ABCTXG    ABC
  11         10  SHR   000072D6 C90F5F4552580000  SILLYJOB
  22          2  EXCL  000072E8 'Z001Z001'        ABCTPCTA  ABC       Z01-ETID
  22          3  EXCL  000072E2 'Z002Z002'        ABCTPCTA  ABC       Z02-ETID
  22          5  EXCL
  22          7  EXCL  000072E9 'Z005Z005'        ABCTPCTA  ABC       Z05-ETID
  22         10  EXCL  000072F0 'Z008Z008'        ABCTPCTA  ABC       Z08-ETID
  22         12  EXCL  000072E3 'Z003Z003'        ABCTPCTA  ABC       Z03-ETID
  22         15  EXCL  000072ED 'Z009Z009'        ABCTPCTA  ABC       Z09-ETID
  23       4783  EXCL  000072F3 'Z011Z011'        ABCTPCTA  ABC       Z11-ETID
...
  29     108191  EXCL  000072E4 'Z004Z004'        ABCTPCTA  ABC       Z04-ETID
  29     113431  EXCL  000072E4 'Z004Z004'        ABCTPCTA  ABC       Z04-ETID
  29     113823  EXCL  000072E4 'Z004Z004'        ABCTPCTA  ABC       Z04-ETID
  29     129953  EXCL  000072E4 'Z004Z004'        ABCTPCTA  ABC       Z04-ETID
  29     164217  EXCL  000072E4 'Z004Z004'        ABCTPCTA  ABC       Z04-ETID
  29     171617  EXCL  000072E4 'Z004Z004'        ABCTPCTA  ABC       Z04-ETID
  29     181868  EXCL  000072E4 'Z004Z004'        ABCTPCTA  ABC       Z04-ETID
  29     197793  EXCL  000072E4 'Z004Z004'        ABCTPCTA  ABC       Z04-ETID
```

DLOCKF Command

Display locked files. The type of lock appears in parentheses following the file number. Possible file types are:

Type	Description
F	The file was locked by LOCKF.
U	The file was locked by LOCKU.
X	The file was locked by LOCKX.
A	The file was advance locked by ALOCKF.

In nucleus cluster environments, the NUCID=0 option can be used to display information for all active cluster nuclei. Information is displayed for each nucleus, one after the other.

DNC Command

Display the number of posted command queue elements (CQEs) waiting to be selected.

In nucleus cluster environments, the NUCID=0 option can be used to display information for all active cluster nuclei. Information is displayed for each nucleus, one after the other.

DNH Command

Display the number of ISNs currently in the hold queue.

In nucleus cluster environments, the NUCID=0 option can be used to display information for all active cluster nuclei. Information is displayed for each nucleus, one after the other.

DNU Command

Display the number of current users.

In nucleus cluster environments, the NUCID=0 option can be used to display information for all active cluster nuclei. Information is displayed for each nucleus, one after the other.

DONLSTAT Command

Note: Not currently available for use with Adabas Parallel Services cluster nuclei.

Display status of each active reorder or invert online process together with the process ID.

In nucleus cluster environments, the NUCID=0 option can be used to display information for all active cluster nuclei. Information is displayed for each nucleus, one after the other.

DPARM Command

Display the Adabas session parameters currently in effect. The parameters are displayed in alphabetic order. In a cluster environment, they are also grouped by nucleus ID (NUCID).

Note: Additional Adabas add-on products and nucleus components will display additional parameters from those shown for a classic nucleus. A sample of the output produced by an ADADBS OPERCOM DPARM run is shown below:

```
ADADBS OPERCOM DPARM

          AOSLOG=YES
          ARNWORKBUFFERS=270
          ASSOSPACEWARN=50,10
          ASYTVS=YES
          AUDITLOG=CONSOLE
          AUTOCQENV=ALL
          AUTOCQTIME=60
          AUTOINCASSOSIZE=500
          AUTOINCASSOTHRESHOLD=80
          AUTOINCASSOTOTAL=10,000
          AUTOINCDATASIZE=1000
          AUTOINCDATATHRESHOLD=80
          AUTOINCDATATOTAL=20,000
          CT=900
          DATASPACEWARN=60,5
          FMXIO=1
          INDEXCROSSCHECK=YES
          INDEXUPDATE=ADVANCED
          INTNAS=3,600
          LARGEPAGE=NO
          LBP= 104,860,416
          LCP=10,000
          LDEUQP=5,000
          LFIOP=1
          LFP=10,240,000
          LI=819,200
          LOGCB=YES
          LOGFB=NO
          LOGGING=NO
          LOGIB=YES
          LOGIO=NO
```

```
          LOGMB=NO
          LOGRB=YES
          LOGSB=NO
          LOGUX=YES
          LOGVB=NO
          LOGVOLIO=NO
          LOGWARN=30
          LP=4,000
          LQ=220,000
          LRPL=104,857,600
          LS=29,952
          LU=64,000
          LWP=1,200,000
          MXTNA=7,200
          MXTSX=7,200
          MXTT=900
          NC=2,000
          NH=5,000
          NISNHQ=1,000
          NONDES=YES
          NPLOGBUFFERS=9
          NQCID=10
          NSISN=51
          NT=30
          NU=10,000
          NWORK1BUFFERS=9
          READONLY=NO
          REFSTPRT=YES
          REVIEW=NO
          RIAFTERUPDATE=NO
          SECUID=WARN
          SMF=YES
          SMFDETAIL=NONE
          SMFINTERVAL=5
          SMFRECNO=255
          SMFSUBSYS=CURR
          SMF89=NO
          TLSCMD=900
          TNAA=3,600
          TNAE=3,600
          TNAX=300
          TT=300
          UPDATECONTROL=NODELAY
          UTIONLY=NO
          V64BIT=YES


 A D A D B S  Terminated normally                    2016-02-24  23:17:00
```

DRES Command

Display the allocated pool space and the highest use level ('high water mark') reached so far during the current session by record count and by percent for the following resources:

Resource Name	Description	Associated Parameter
AB - Pool	Attached buffer table	NAB
CQ - Pool	Command queue	NC
DUQ - Pool	Unique descriptor pool	LDEUQP
FI - Pool	Internal format buffer pool	LFP
HQ - Pool	Hold queue	NH
Plog-IO B	PLOG I/O buffers	NPLOGBUFFERS
REDO - Pool	Cluster redo pool (only with Adabas cluster environments)	LRDP
RPL - Pool	Replication pool (only with Event Replicator for Adabas environments)	LRPL
SC - Pool	Security pool	LCP
TBI - Pool	Pool for the table of ISNs	LI
TBS - Pool	Pool for the table of sequential commands	LQ
UQ - Pool	User queue	NU
UQF - Pool	User queue file list pool	NU
Wrk1 - IO B	Work I/O buffers	NWORK1BUFFERS
WORK - Pool	Work pool (WP)	LWP
Work Prt1	Work part 1 area (WKP1) **Note:** The maximum pool value of Work part 1 is derived from the LP parameter. It corresponds to the maximum number of blocks a transaction can spend on Work Part 1 before Adabas decides to back it out.	LP
Work Prt1b	Work Part 1 extension (only with Adabas cluster environments)	CLUWORK1CACHE
Work Prt2	Work part 2 area (WKP2)	LWKP2
Work Prt3	Work part 3 area (WKP3)	
XID -Pool	Pool for global transaction IDs (only with Adabas Transaction Manager environments)	NU

The actual values are displayed in nucleus message ADAN28, described in the *Adabas Messages and Codes Manual*.

DSPACE Command

Display space defined and used in ASSO and DATA.

Here is sample output from the DSPACE operator command run using the ADADBS OPERCOM utility function::

```
ADADBS OPERCOM DSPACE

         Database ASSO usage is 80%
         16,101KB of 20,079KB in use
         6,481 of 8,082 blocks in use
         24 of 30 cylinders in use

         Database DATA usage is 71%
         15,983KB of 22,204KB in use
         3,232 of 4,490 blocks in use
         22 of 30 cylinders in use
```

DSTAT Command

Display the current Adabas nucleus operating status.

Note: After issuing a REFRESHSTATS, DSTAT displays the refreshed statistics.

DTH Command

Display thread status.

DUQ Command

Display all active and inactive user queue elements.

Here is sample output from the DUQ operator command run using the ADADBS OPERCOM utility function:

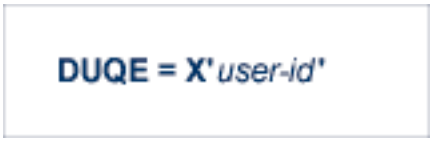
```
  User    User/Terminal-ID  Jobname   SECUID   ETID      Typ  State  Active
-------------------------------------------------------------------------
00002BD8  'U001U001'        ABCTXG    ABC               ACC  OK     09:46:03
00002C20  'Z001Z001'        ABCTPCTA  ABC      Z01-ETID ET   ET     09:46:19
00002C27  'Z002Z002'        ABCTPCTA  ABC      Z02-ETID ET   TRANS  09:46:18
00002C26  'Z003Z003'        ABCTPCTA  ABC      Z03-ETID ET   TRANS  09:46:19
00002C2E  'Z004Z004'        ABCTPCTA  ABC      Z04-ETID ET   ET     09:46:19
00002C13  'Z005Z005'        ABCTPCTA  ABC      Z05-ETID ET   T-OUT  09:40:31
00002C30  C8F39ABD5A18DE84  ABCDUQ    ABC               UTI  OK     09:46:19
00000002  'ABC    1'        DAEFCO    ABC               UTI  OK     08:33:56
```

DUQA Command

Display all user queue elements (UQEs).

In nucleus cluster environments, the NUCID=0 option can be used to display information for all active cluster nuclei. Information is displayed for each nucleus, one after the other.

DUQE Command



Display a user queue element for the specified Adabas-assigned user ID as follows:

```
DUQE=X'A3CF2'
```

The user ID must be entered in hexadecimal format. Do not use a job name for the user ID. In nucleus cluster environments, NUCID must always be specified because the user ID is not unique to the cluster. When a user is associated with a time zone this information is displayed.

Here is sample output (when the user is not associated with a time zone) from the DUQE operator command run using the ADADBS OPERCOM utility function:

```
                                                                          Last
  User    User/Terminal-ID  Jobname   SECUID   ETID      Typ  State  Active
 ------------------------------------------------------------------------------
 000001A6  'Z001Z001'        AZUTPCTA  AZU               ET   TRANS  13:41:05

Communication ID  = 000FA10E20980000 4040404040404040 00FB0800 ...
Session start     = 13:38:42
Transaction start = 13:41:04

Number of files   =    8

             File =   21 (ACC)
             File =   22 (ACC)
             File =   23 (ACC)
             File =   25 (UPD)
             File =   26 (UPD)
             File =   27 (UPD)
             File =   28 (ACC)
             File =   29 (UPD)
```

Here is sample output (when the user is associated with a time zone) from the DUQE operator command run using the ADADBS OPERCOM utility function:

```
                                                                          Last
  User    User/Terminal-ID  Jobname   SECUID   ETID      Typ  State  Active
 ------------------------------------------------------------------------------
 000001A6  'Z001Z001'        AZUTPCTA  AZU               ET   TRANS  13:41:05

Time Zone         = AMERICA/DENVER

Communication ID  = 000FA10E20980000 4040404040404040 00FB0800 ...
Session start     = 13:38:42
Transaction start = 13:41:04

Number of files   =    8

             File =   21 (ACC)
             File =   22 (ACC)
             File =   23 (ACC)
             File =   25 (UPD)
             File =   26 (UPD)
             File =   27 (UPD)
             File =   28 (ACC)
             File =   29 (UPD)
```

DUUQE Command

Display utility user queue elements (UQEs). Up to 100 user queue elements will be displayed.

In nucleus cluster environments, the NUCID=0 option can be used to display information for all active cluster nuclei. Information is displayed for each nucleus, one after the other.

DVOLIO Command

Display ASSO and DATA I/Os by volume serial (VOLSER) number. The number of reads and writes to each volume is displayed.

In nucleus cluster environments, the NUCID=0 option can be used to display information for all active cluster nuclei. Information is displayed for each nucleus, one after the other.

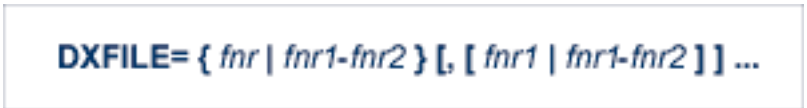
DXCACHE Command

Issue the `DXCACHE` command against cluster nuclei to display the primary cache-related statistics. Statistics are displayed in messages on the console. The kinds of statistics displayed are described in *External Cache Statistics (Cluster Nucleus Only)*, in the *Adabas Cluster Services Operations Guide* or in *Global Cache Statistics (Cluster Nucleus Only)* in the *Adabas Parallel Services Operations Guide*.

The full set of statistics shown in this output is displayed only for users who have the selectable unit Adabas Online System (AOS) installed.

If you have installed only the demo version of AOS delivered with Adabas, only the statistics in the sections *Totals*, *Data Storage*, and *Normal Index* are displayed using this command.

DXFILE Command



Issue the `DXFILE` command against cluster nuclei to display cache-related statistics for files. File numbers can be specified in sequences, separated by commas. Ranges of file numbers can also be specified in the sequence. A maximum of five files can be specified in the command, so if you want to get results for more than five files, specify a range of files instead. The following are valid examples of ADADBS OPERCOM DXFILE specifications:

```
DXFILE=10-99
DXFILE=1,2,10-99
DXFILE=10-99,200
DXFILE=10-99,200-300
```

Statistics are displayed in messages on the console. The kinds of statistics displayed are described in *External Cache Statistics (Cluster Nucleus Only)*, in the *Adabas Cluster Services Operations Guide* or in *Global Cache Statistics (Cluster Nucleus Only)*, in the *Adabas Parallel Services Operations Guide*.

DXLOCK Command

Issue the DXLOCK command against cluster nuclei to display lock-related statistics. Statistics are displayed in messages on the console. The kinds of statistics displayed are described in *External Lock Statistics (Cluster Nucleus Only)*, in the *Adabas Cluster Services Operations Guide* or in *Global Lock Statistics (Cluster Nucleus Only)*, in the *Adabas Parallel Services Operations Guide*.

DXMSG Command

The DXMSG command can be used to display the messaging performance statistics available for Adabas Cluster Services or Adabas Parallel Services. Statistics are displayed in messages on the console. The kinds of statistics displayed are described in *Messaging Statistics*, in the *Adabas Cluster Services Operations Guide* or *Adabas Parallel Services Operations Guide*.

The statistics produced by the DXMSG command can be used to determine the impact of messaging on system performance and to determine how to set the ADARUN MXMSG parameter.

DXSTAT Command

Use `DXSTAT` command against cluster nuclei to display all cache- and lock-related statistics. Statistics are displayed in messages on the console. The kinds of statistics displayed are described in *External Cache Statistics (Cluster Nucleus Only)*, *External Lock Statistics (Cluster Nucleus Only)* and *WORK Data Set I/O Statistics (Cluster Nucleus Only)*, in the *Adabas Cluster Services Operations Guide* and in *Global Cache Statistics (Cluster Nucleus Only)*, *Global Lock Statistics (Cluster Nucleus Only)* and *WORK Data Set I/O Statistics (Cluster Nucleus Only)*, in the *Adabas Parallel Services Operations Guide*.

The full set of external cache statistics shown in this output is displayed only for users who have the selectable unit Adabas Online System (AOS) installed.

If you have installed only the demo version of AOS delivered with Adabas, only the external cache statistics in the sections *Totals*, *Data Storage*, and *Normal Index* are displayed using this command. All file cache statistics for files and all external lock statistics are displayed.

DXWORK Command

Use the `DXWORK` command to display the read and write I/O statistics for the accesses to the WORK datasets of peer nuclei by a particular nucleus in the cluster. The DXWORK command may or may not display I/O statistics for a nucleus' own WORK dataset.

The DXWORK command is only valid in cluster environments. The kinds of statistics displayed are described in *WORK Data Set I/O Statistics (Cluster Nucleus Only)*, in the *Adabas Cluster Services Operations Guide* and in the *Adabas Parallel Services Operations Guide*

DZSTAT Command

Display ZIIP related statistics.

Optional Parameters

Parameter	Description
ALL	Extended Statistics and Scheduling by type of work statistics. The ALL keyword may be specified and will include Extended Statistics and Scheduling by type of work statistics.

This function is only available if the nucleus was started with the parameter ADARUN ZIIP=YES.

In nucleus cluster environments, the NUCID parameter can be used to display information only for the specified nucleus. Otherwise, information is displayed for each active nucleus, one after the other.

The statistics displayed by DZSTAT correspond and are equivalent to the zIIP-related statistics at the end of the nucleus session statistics. See *Understanding the zIIP-Related Statistics* in the *Adabas for zIIP* documentation for detailed information about the various statistical figures.

FEOFAL Command

Close the current dual or multiple Audit log and switch to another dual or multiple Audit log. This command is valid only if dual or multiple audit logging is in effect and only for Adabas Audit Servers.

In nucleus cluster environments, use the GLOBAL option to switch the dual or multiple audit log in all cluster nuclei at the same time.

FEOFCL Command

Close the current dual or multiple Command log and switch to the other dual or another multiple Command log. This command is valid only if dual or multiple command logging is in effect.

In nucleus cluster environments, the GLOBAL option can be used to switch the dual or multiple command log in all cluster nuclei at the same time.

FEOFPL Command

Close the current dual or multiple data Protection log and switch to the other dual or another multiple Protection log. This command is valid only if dual or multiple data protection logging is in effect.

In nucleus cluster environments, the GLOBAL option can be used to switch the dual or multiple protection log in all cluster nuclei at the same time.

HALT Command

Stop Adabas session. A BT (backout transaction) command is issued for each active ET logic user. The Adabas session is then terminated; no dumps are produced.

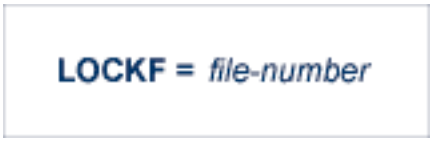
In nucleus cluster environments, the GLOBAL option can be used to halt the Adabas session in all active cluster nuclei.

INDEXCROSSCHECK Command

Alter the setting of the ADARUN `INDEXCROSSCHECK` parameter while the nucleus is active. This operator command allows you to dynamically specify whether index crosschecking is turned on or off. Index crosschecking is a process Adabas can complete to ensure that a data storage record it is reading actually matches the descriptor value in the index by which the record was found. For more information, read *INDEXCROSSCHECK Parameter: Data Storage Record Validation*, in the *Adabas Operations Manual*.

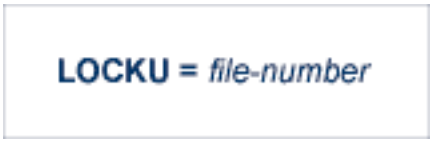
Note: Attempts to change the `INDEXCROSSCHECK` setting (via the `INDEXCROSSCHECK` command) in a cluster environment will be rejected. In a cluster nucleus (CLUSTER=SYSPLEX or CLUSTER=LOCAL), Adabas sets INDEXCROSSCHECK to "YES", overriding any user-specified INDEXCROSSCHECK value, and validates the descriptor value from the index against the corresponding value from the data storage.

LOCKF Command



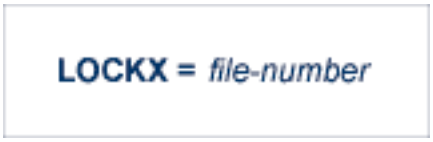
Lock the specified file. The specified file will be locked at all security levels.

LOCKU Command



Lock the specified file for all non-utility use. Adabas utilities can use the file normally.

LOCKX Command



Lock the specified file for all users except EXU or EXF users. EXU and EXF users can use the file normally. The lock is released automatically when an EXU user issues an OP command.

LOGGING Command

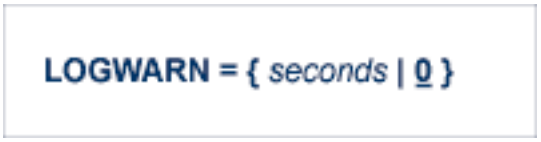
Start command logging.

LOGxx Command

Begin logging as indicated by *xx* for each command logged where *xx* is one of the following:

- CB - the Adabas control block
- FB - the Adabas format buffer
- IB - the Adabas ISN buffer
- IO - Adabas I/O activity
- RB - the Adabas record buffer
- SB - the Adabas search buffer
- UX - user data passed in the seventh parameter of the Adabas parameter list
- VB - the Adabas value buffer
- VOLIO - the extended I/O list for CLOGLAYOUT=5 and CLOGLAYOUT=8

LOGWARN Command



Use the LOGWARN command to specify how often the PLOG and CLOG status is checked and resulting alert messages are produced. Valid values range from zero (0) through 2147483647 seconds. The default is 0, indicating that no PLOG or CLOG status checking occurs and no corresponding alert messages are produced. If a non-zero value is specified for LOGWARN, a valid user exit 2 or user exit 12 must also be specified.

MXCANCEL Command

The MXCANCEL command can be used against cluster nuclei to dynamically change (while the Adabas nucleus is running) the setting of the MXCANCEL ADARUN parameter for a nucleus. This command can be used to specify the maximum number of seconds for which one cluster nucleus waits for the termination of another nucleus in the cluster that it has canceled for not responding to an internal, intracluster command. Valid values range from 15 through 2147483647.

If the new MXCANCEL value is less than or equal to the current MXCANCELWARN setting, the MXCANCELWARN setting is automatically set to zero (0). (You can then use the MXCANCELWARN command to dynamically set the MXCANCELWARN setting appropriately.)

For more information about the MXCANCEL setting for a nucleus, read about the ADARUN MXCANCEL parameter in the *Adabas Operations Manual*.

MXCANCELWARN Command

The MXCANCELWARN command can be used to dynamically change (while the Adabas nucleus is running) the setting of the MXCANCELWARN ADARUN parameter for a nucleus. This command can be used to specify the number of seconds after an intracluster cancellation request is made when the cluster nucleus requesting the cancellation should issue warnings about the inability of the canceled peer nucleus to terminate. Valid values can be zero (0) or an integer ranging from 4 through the value of MXCANCEL minus 1 (MXCANCEL-1).

The value of the MXCANCELWARN setting must be less than the value of the MXCANCEL setting. If MXCANCELWARN is set to a value greater than or equal to the value specified for MXCANCEL, the value is rejected. If MXCANCELWARN is set to zero, no warnings are issued about canceled cluster nuclei that are slow to terminate.

For more information about the MXCANCELWARN setting for a nucleus, read about the ADARUN `MXCANCELWARN` parameter in the *Adabas Operations Manual*.

MXMSG Command

The MXMSG command can be used to dynamically change (while the Adabas nucleus is running) the setting of the `MXMSG` ADARUN parameter for a cluster nucleus. This command can be used to specify the maximum number of seconds in which one cluster nucleus waits for the response of another nucleus in the cluster to an internal, intracluster command. Valid values range from 15 through 32767.

If the new MXMSG value is less than or equal to the current MXMSGWARN setting, the MXMSGWARN setting is automatically set to zero (0). (You can then use the MXMSGWARN command to dynamically set the MXMSGWARN setting appropriately.)

For more information about the MXMSG setting for a nucleus, read about the ADARUN `MXMSG` parameter in the *Adabas Operations Manual*.

MXMSGWARN Command

The MXMSGWARN command can be used to dynamically change (while the Adabas nucleus is running) the setting of the `MXMSGWARN` ADARUN parameter for a cluster nucleus. This command can be used to specify the number of seconds after an intracluster request is made when the cluster nucleus issuing the intracluster request should issue warnings about the failure of the target cluster nucleus to respond. Valid values can be zero (0) or an integer ranging from 4 through the value of MXMSG minus 1 (MXMSG-1).

The value of MXMSGWARN must be less than the value of MXMSG. If MXMSGWARN is set to a value greater than or equal to the value specified for MXMSG, the value is rejected. If MXMSGWARN is set to zero, no warnings are issued about cluster nuclei that are slow to respond.

For more information about the MXMSGWARN setting for a nucleus, read about the ADARUN MXMSGWARN parameter in the *Adabas Operations Manual*.

MXSTATUS Command

The MXSTATUS command can be used to dynamically change (while the Adabas nucleus is running) the setting of the MXSTATUS ADARUN parameter for a cluster nucleus. This command can be used to specify the number of seconds between member-level XCF status monitoring heartbeats. Valid values range from 15 through 21474836.

Note: The MXSTATUS command is only used for Adabas Cluster Services and not for Adabas Parallel Services. Adabas Parallel Services does not use XCF and ignores the setting.

The MXSTATUS command can only be used to change the value of the MXSTATUS parameter if the ADARUN MXSTATUS parameter is not zero (0). This command cannot be used to turn status monitoring on (by specifying a nonzero value if the ADARUN MXSTATUS setting is zero) or to turn it off (by specifying a value of zero when the ADARUN MXSTATUS setting is nonzero). However, setting MXSTATUS to a very high value is effectively the same as turning status monitoring off (monitoring will occur very infrequently at least).

For more information about the MXSTATUS setting for a nucleus, read about the ADARUN MXSTATUS parameter in the *Adabas Operations Manual*.

MXWTOR Command

The optional MXWTOR command can be used to dynamically change (while the Adabas nucleus is running) the setting of the MXWTOR ADARUN parameter for a cluster nucleus. This command can be used to specify the maximum number of seconds that a cluster nucleus should wait for an operator response to a self-terminating operator query. Valid values range from 15 through 64800 or zero (0).

If MXWTOR is set to zero, the operator query does not occur (no ADAX9J messages are written) and no operator intervention is expected.

For more information about the MXWTOR setting for a nucleus, read about the ADARUN MXWTOR parameter in the *Adabas Operations Manual*.

NOLOGGING Command

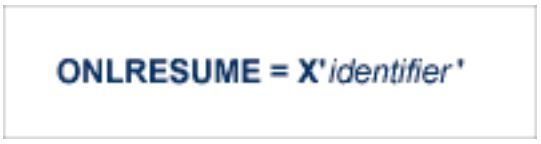
Stop or prevent command logging.

NOLOGxx Command

Stop or prevent logging of *xx* where *xx* is one of the following:

- CB - the Adabas control block
- FB - the Adabas format buffer
- IB - the Adabas ISN buffer
- IO - Adabas I/O activity
- RB - the Adabas record buffer
- SB - the Adabas search buffer
- UX - user data passed in the seventh parameter of the Adabas parameter list
- VB - the Adabas value buffer
- VOLIO - the extended I/O list for CLOGLAYOUT=5 and CLOGLAYOUT=8

ONLRESUME Command

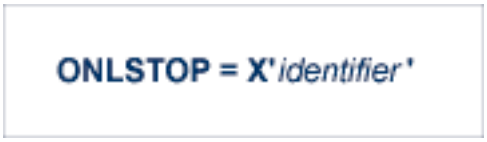


Note: Not currently available for use with Adabas Parallel Services cluster nuclei.

Resume a previously suspended online reorder or invert process.

In a cluster environment, NUCID must always be specified because the online process ID is not unique to the cluster.

ONLSTOP Command



Note: Not currently available for use with Adabas Parallel Services cluster nuclei.

Stop an online reorder or invert process cleanly. The process continues up to its next interrupt point in order to produce a consistent state, and then terminates after performing all necessary cleanup.

In a cluster environment, NUCID must always be specified because the online process ID is not unique to the cluster.

ONLSUSPEND Command

Note: Not currently available for use with Adabas Parallel Services cluster nuclei.

Suspend an online reorder or invert process. The process continues up to its next interrupt point in order to produce a consistent state, performs a command throwback, and enters a state where it cannot be selected for processing. This command is useful if the online process is consuming too much of the nucleus resources.

In a cluster environment, NUCID must always be specified because the online process ID is not unique to the cluster.

RALOCKF Command

Remove the advance lock on the specified file (see ALOCKF command) without running the utility.

This command is available in cluster and non-cluster environments.

RALOCKFA Command

Remove the advance lock on all files for which it has been set (see ALOCKF command) without running the utility.

This command is available in cluster and non-cluster environments.

RDUMPST Command

Terminate online dump status. This command is normally used if online execution of the ADASAV utility has terminated abnormally.

READONLY Command

Note: Not currently available for use with cluster nuclei.

Switches READONLY status on or off.

REVIEW Command

Note: Not currently available for use with Adabas Parallel Services cluster nuclei.

Deactivate Adabas Review; change from hub mode to local mode; specify or change the Adabas Review hub with which a nucleus communicates.

RPLCHECK Command

Note: Not valid for use with an Adabas nucleus; only valid for use against an Event Replicator Server and only for an Event Replicator Server as of Event Replicator for Adabas 3.4 SP1. If this command is issued against a database that is not an Event Replicator Server, error messages result.

Use this command to perform the replication cross-check function for all active databases known (defined in one or more subscriptions) to the Event Replicator Server. When this command is run using the ADADBS OPERCOM function, the information about the cross-check function is printed to the ADADBS DDDRUCK data set. The information printed by ADADBS is the same as the information printed by the Event Replicator Server during the cross-check process initiated by the RPLCHECK operator command.

SECUID Command

Use the SECUID command to alter the ADARUN SECUID parameter while the nucleus is active. For complete information about the SECUID ADARUN parameter, read *SECUID Parameter: Security System User ID Requirement Level*, in the *Adabas Operations Manual*.

STOPF Command

Stop all users who are using the specified file. Any open transactions of the stopped users are backed out. Unless PURGE is also specified, a stopped user who returns (by sending a command) receives response code 9 (ADARSP009).

If the optional PURGE parameter is specified, the stopped users are also deleted (their user queue elements are removed from the user queue).

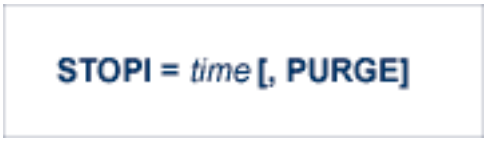
This command does not stop EXF or UTI users.

The following is an example of using the PURGE parameter:

```
ADADBS OPERCOM STOPF=5,PURGE
```

Caution: If Adabas is running with ADARUN OPENRQ=NO (specifying that users are not required to issue an OP as the first command of the session), run the STOPF command with `PURGE` only if you are certain that the users to be deleted are no longer active. If a user with an open transaction is deleted, but then returns (by sending a command), no indication is given about the transaction backout. If the user continues the transaction, logical inconsistencies in the database could occur.

STOPI Command



Stop all users who have not executed a command during the specified time interval (in seconds). Any open transactions of the stopped users are backed out. Unless PURGE is also specified, a stopped user who returns (by sending a command) receives response code 9 (ADARSP009).

This command does not stop EXF or UTI users.

If the optional PURGE parameter is specified, the stopped users are also deleted (their user queue elements are removed from the user queue).

The following is an example of using the PURGE parameter:

```
ADADBS OPERCOM STOPI=3600,PURGE
```

Caution: If Adabas is running with ADARUN OPENRQ=NO (specifying that users are not required to issue an OP as the first command of the session), run the STOPI command with `PURGE` only if you are certain that the users to be deleted are no longer active. If a user with an open transaction is deleted, but then returns (by sending a command), no indication is given about the transaction backout. If the user continues the transaction, logical inconsistencies in the database could occur.

STOPSU Command

Use the STOPSU command to stop and delete all users with the specified security user ID (*secuid*). Any open transactions of the stopped users will be backed out. No response code is issued; the next time the stopped user issues a command, a new user queue element (UQE) is created.

Caution: If Adabas is running with ADARUN OPENRQ=NO (specifying that users are not required to issue an OP as the first command of the session), run the STOPSU command only if you are certain that the users to be deleted are no longer active. If a user with an open transaction is deleted, but then returns (by sending a command), no indication is given about the transaction backout. If the user continues the transaction, logical inconsistencies in the database could occur. If this is a concern, use the STOPSUR command instead.

Note: The STOPSU=*secuid* command is not allowed for online reorder or invert processes. Use the ONLSTOP=X'*identifier*' command instead.

STOPSUR Command

```
STOPSUR = secuid
```

Use the STOPSUR command to stop a user with a specified security user ID (*secuid*). Any open transactions of the stopped user are backed out. The stopped user is only deleted after he or she has issued a subsequent command and response code 22 (ADARSP22), subcode 54 has been issued in response to that command. This response code-subcode combination is used to notify users that their user session resources have been freed. Only after the response code-subcode combination has been issued is the user queue element (UQE) of the stopped user deleted.

Note: The STOPSUR=*secuid* command is not allowed for online reorder or invert processes. Use the ONLSTOP=X'*identifier*' command instead.

STOPU Command

```
STOPU = { X'user-id' | job-name }
```

Use the STOPU command to stop and delete the user with the Adabas-assigned user ID (in the form shown in the display commands), or to stop and delete all users with the specified job name (*job-name*). Any open transaction by the stopped users will be backed out. No response code is issued; the next time a stopped user issues a command, a new user queue element (UQE) is created.

Caution: If Adabas is running with ADARUN OPENRQ=NO (specifying that users are not required to issue an OP as the first command of the session), run the STOPU command only if you are certain that the users to be deleted are no longer active. If a user with an open transaction is deleted, but then returns (by sending a command), no indic-

ation is given about the transaction backout. If the user continues the transaction, logical inconsistencies in the database could occur. If this is a concern, use the STOPUR command instead.

Note: The `STOPU=X'userid'` command is not allowed for online reorder or invert processes. See the `ONLSTOP=X'identifier'` command instead.

The user ID must be specified in hexadecimal format; for example:

```
STOPU=X'1CF2' ↩
```

In a cluster environment, NUCID must always be specified because the user ID is not unique to the cluster.

STOPUR Command

Use the STOPUR command to stop a user with the Adabas-assigned user ID (in the form shown in the display command) or to stop a user with the specified job name. Any open transactions of the stopped user are backed out. The stopped user is only deleted after he or she has issued a subsequent command and response code 22 (ADARSP22), subcode 54 has been issued in response to that command. This response code-subcode combination is used to notify users that their user session resources have been freed. Only after the response code-subcode combination has been issued is the user queue element (UQE) of the stopped user deleted.

Note: The STOPUR=X'*userid*' command is not allowed for online reorder or invert processes. Use the ONLSTOP=X'*identifier*' command instead.

The user ID must be specified in hexadecimal format; for example:

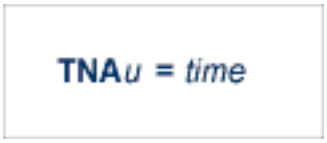
```
STOPUR=X'1CF2'
```

In a cluster environment, NUCID must always be specified because the user ID is not unique to the cluster.

SYNCC Command

Force resynchronization of all ET users on the nucleus. The nucleus waits for all ET users to reach ET status before continuing.

TNAx Command



Set non-activity time limit (in seconds) for users where *u* is one of the following:

- A - for access-only (ACC) users
- E - for ET logic users
- X - for exclusive control (EXF/EXU) users

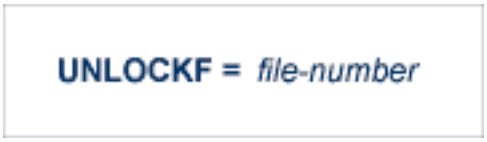
If specified, *time* must be a value greater than zero; it overrides the ADARUN value.

In nucleus cluster environments, the TNAu commands are global by definition and affect all nuclei in the cluster. If a NUCID is specified, it is ignored.

TT Command

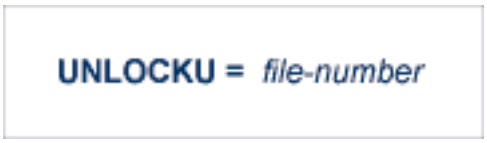
Set transaction time limit (in seconds) for ET logic users. If specified, this value must be greater than zero; it overrides the ADARUN value. In nucleus cluster environments, the TT command is global by definition and affects all nuclei in the cluster. If a NUCID is specified, it is ignored.

UNLOCKF Command



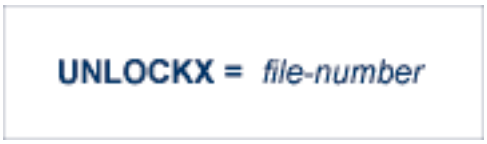
Unlock the specified file and restore its usage to the prelocked status.

UNLOCKU Command



Unlock the specified file for utility use and restore it to its prelocked status for non-utility users.

UNLOCKX Command



Unlock the specified file and restore its usage to the prelocked status.

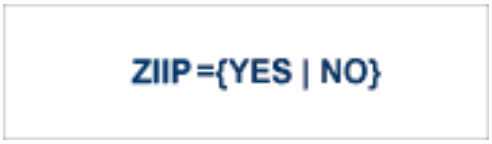
UTIONLY Command

Note: Not currently available for use with Adabas Parallel Services cluster nuclei.

Switch UTIONLY status on or off.

In nucleus cluster environments, the UTIONLY command is global by definition and affects all nuclei in the cluster. If a NUCID is specified, it is ignored.

ZIIP Command

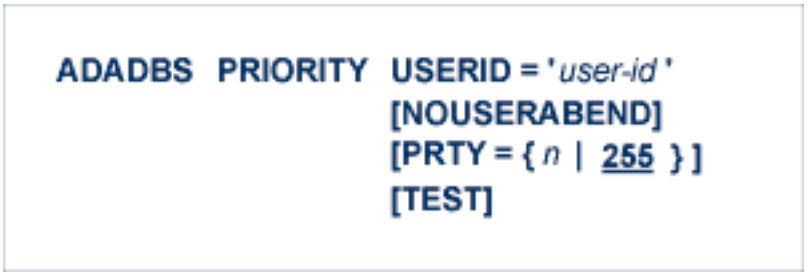


Use the `ZIIP` operator command to turn on or off the use of System z Integrated Information Processors (zIIP) in the Adabas nucleus. Issuing `ZIIP=YES` will tell the Adabas nucleus to run in SRB mode when possible and enable the use of zIIPs.

Issuing `ZIIP=NO` will tell the Adabas nucleus to stay in TCB mode and disable the use of zIIPs.

The ZIIP operator command may only be used in an Adabas nucleus started with `ADARUN ZIIP=YES`.

ADADBS PRIORITY: Change User Priority



ADADBS REACTLOG: Reactivating Command Logging

ADADBS RECORDSPANNING: Enable or Disable Record Spanning

```
ADADBS  RECORDSPANNING  FILE = file-number
                        MODE = { ON | OFF }
                        [PASSWORD = 'password' ]
                        [NOUSERABEND]
                        [TIMELIMIT = { 60  |  timelimit } ]
                        [TEST]
```

ADADBS RECOVER: Recover Space

```
ADADBS  RECOVER  [NOUSERABEND]
                 [TEST]
```

ADADBS REFRESH: Set File to Empty Status

```
ADADBS  REFRESH  FILE = file-number
                 [NOUSERABEND]
                 [PASSWORD = 'password ' ]
                 [TEST]
```

ADADBS REFRESHSTATS: Reset Statistical Values

```
ADADBS REFRESHSTATS  [ ALL ]
                     [CMDUSAGE]
                     [COUNTERS]
                     [FILEUSAGE]
                     [IOS]
                     [NUCID = nucid ]
                     [NOUSERABEND]
                     [POOLUSAGE]
                     [THREADUSAGE]
                     [TIMES]
```

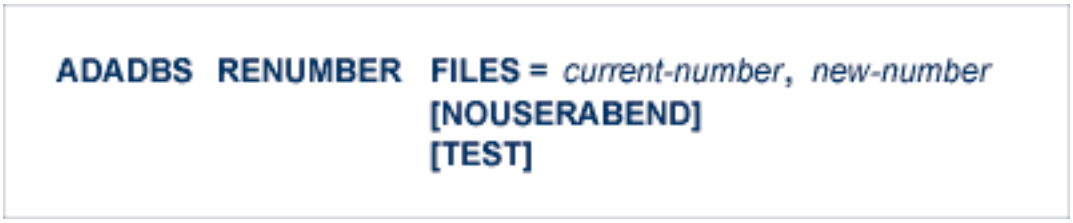
ADADBS RELEASE: Release Descriptor

```
ADADBS  RELEASE  FILE = file-number
                 DESCRIPTOR = 'name'
                 [INPARALLEL={ YES|NO }]
                 [NOUSERABEND]
                 [PASSWORD = 'password' ]
                 [TEST]
```

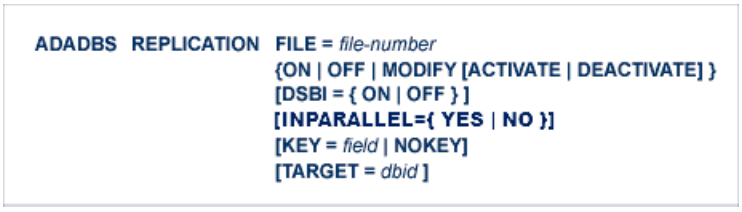
ADADBS RENAME: Rename a File or Database

```
ADADBS  RENAME   NAME = 'name'
                 [FILE = file-number ]
                 [INPARALLEL={ YES|NO }]
                 [NOUSERABEND]
                 [PASSWORD = 'password' ]
                 [TEST]
```

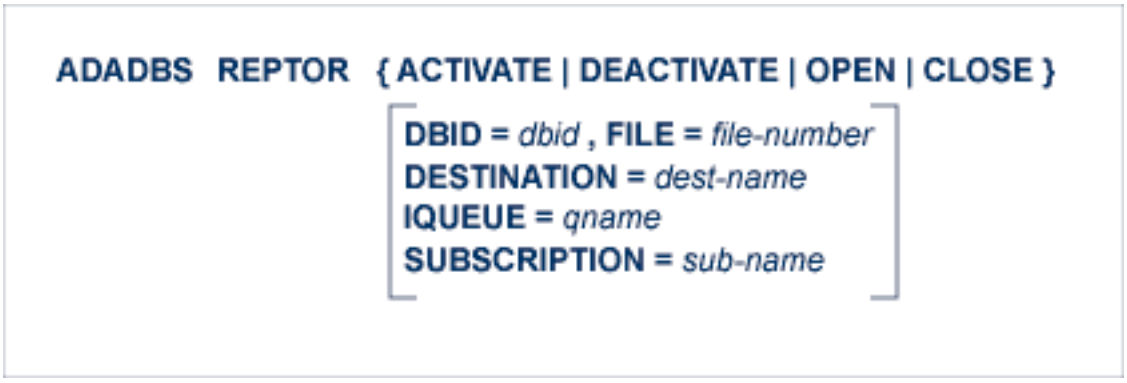
ADADBS RENUMBER: Change File Number



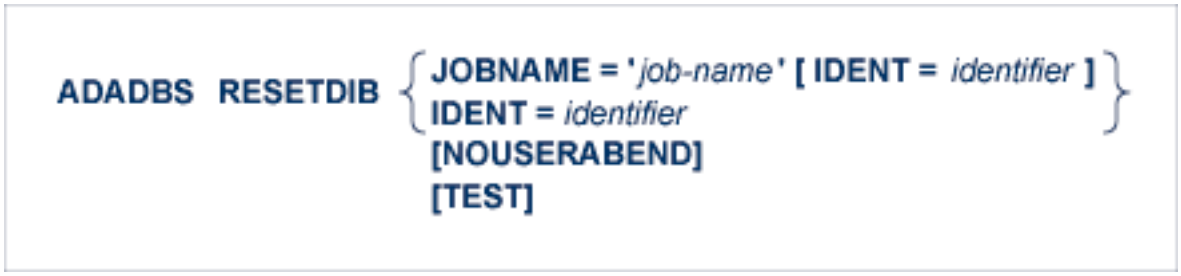
ADADBS REPLICATION: Activating or Deactivating Replication



ADADBS REPTOR: Activating, Deactivate, Open or Close an Event Replicator for Adabas Resource

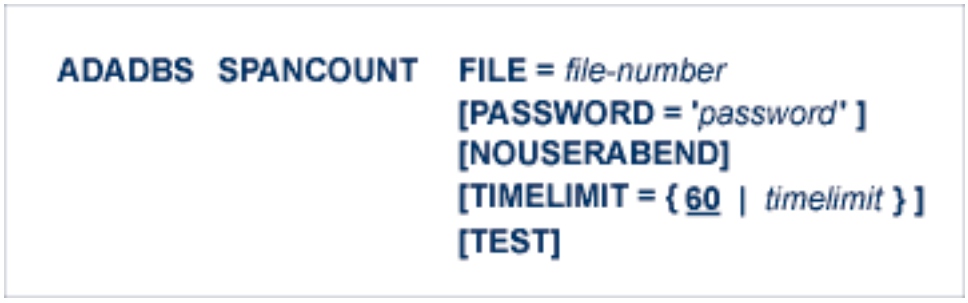


ADADBS RESETDIB: Reset Entries in Active Utility List

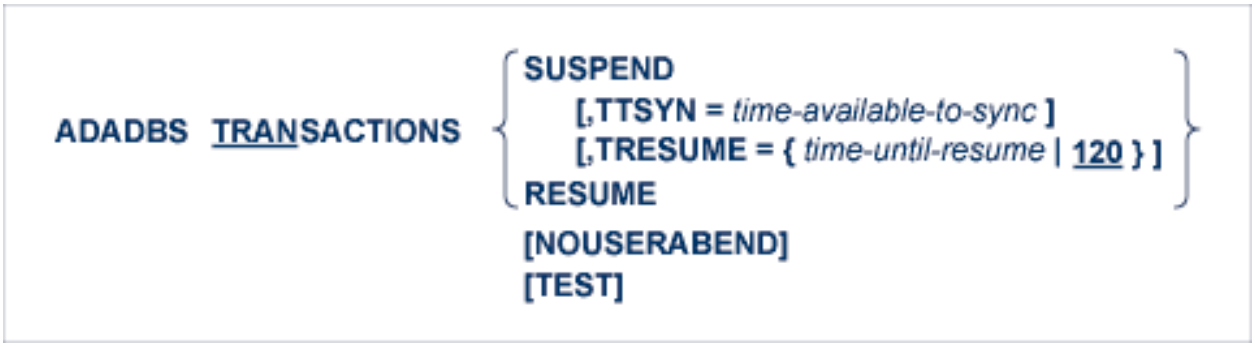


ADADBS RESETPPT: Reset PPT Blocks

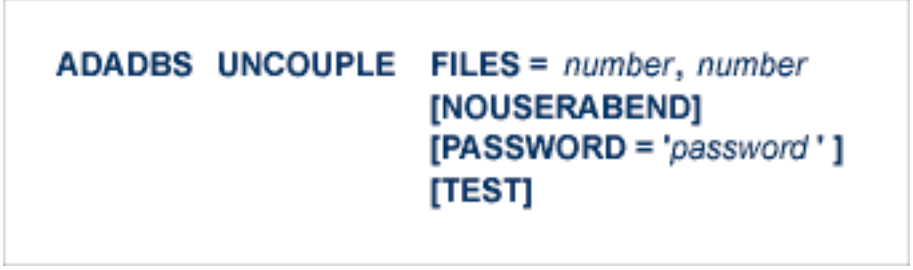
ADADBS SPANCOUNT: Count Spanned Records



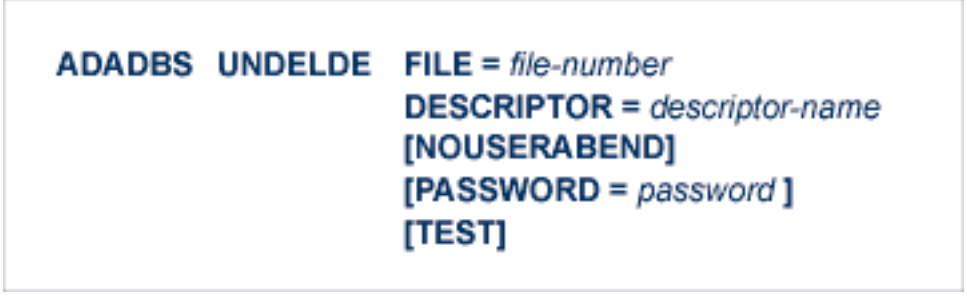
ADADBS TRANSACTIONS: Suspend and Resume Update Transaction Processing



ADADBS UNCOUPLE: Uncouple Files



ADADBS UNDELDE: Undelete a Logically Deleted Descriptor



ADADBS UNDELFN: Logically Undelete Fields

```
ADADBS UNDELFN  FILE = file-number
                FIELDLIST = ' field-list '
                [PASSWORD = password ]
                [NOUSERABEND]
                [TEST]
```

ADADEF DEFINE: Define a Database and Checkpoint File

```
ADADEF  DEFINE   ASSOSIZE = size-list
                 DATASIZE = size-list
                 WORKSIZE = size
                 FILE = file-number , CHECKPOINT
                       DSSIZE = size
                       MAXISN = maximum-number-of-records-expected
                       [ACRABN = starting-rabn ]
                       [ASSOPFAC = { Associator-padding-factor | 10 } ]
                       [ASSOVOLUME = ' Associator-extent-volume ' ]
                       [DATAPFAC = { Data-Storage-padding-factor | 10 } ]
                       [DATAVOLUME = ' Data-Storage-extent-volume ' ]
                       [DSDEV = device-type ]
                       [DSRABN = starting-rabn ]
                       [DSREUSE = { NO | YES } ]
                       [ISNSIZE = { 3 | 4 } ]
                       [MAXDS = maximum-Data-Storage-secondary-allocation ]
                       [MAXNI = maximum-normal-index-secondary-allocation ]
                       [MAXUI = maximum-upper-index-secondary-allocation ]
                       [NAME = { ' file-name ' |CHECKPOINT } ]
                       [NIRABN = starting-rabn ]
                       [NISIZE = size ]
                       [UIRABN = starting-rabn ]
                       [UISIZE = size ]
                 [ASSODEV = { device-type-list | ADARUN-device } ]
                 [DATADEV = { device-type-list | ADARUN-device } ]
                 [DBIDENT = { database-id | ADARUN-dbid } ]
                 [DBNAME = { database-name | GENERAL-DATABASE } ]
                 [FACODE = { alpha-EBCDIC-key | 37 } ]
                 [FWCODE = { wide-key | 4095 } ]
                 [MAXFILES = { maximum-number-of-files | 255 } ]
                 [NOUSERABEND]
                 [OVERWRITE]
                 [RABNSIZE = { 3 | 4 } ]
                 [REPTOR = YES | NO ]
                 [UACODE = { alpha-ASCII-key | 437 } ]
                 [UES = { YES | NO } ]
                 [UWCODE = wide-key ]
                 [WORKDEV = device-type-list ]
```

ADADEF MODIFY: Change File Encodings

```
ADADEF  MODIFY  [FACODE = alpha-EBCDIC-key ]
                [FWCODE = wide-key ]
                [NOUSERABEND]
                [REPTOR = YES | NO ]
                [UACODE = alpha-ASCII-key ]
                [UES = { YES | NO } ]
                [UWCODE = wide-key ]
```

ADADEF NEWWORK: Define a Work File

```
ADADEF  NEWWORK  WORKSIZE = size
                 [NOUSERABEND]
                 [WORKDEV = device-type-list ]
```

ADADRU SPACEUSAGE: Database File Space Usage Report

```
ADADRU SPACEUSAGE   [FILE = { file | file1 - file2 [, file | file1 - file2 ]... } ]
                        [PFILESPACE = { SUMMARY | DETAIL} ]
                        [PASSOSPACE = { SUMMARY | DETAIL}]
                            [FROMRABN = blknum ] [TORABN = blknum ]
                        [PDATASPACE = { SUMMARY | DETAIL}]
                            [FROMRABN = blknum ] [TORABN = blknum ]
                        [SAMPLING = { percentage | 100 } ]
                        [INCRUSAGE = { percentage | 5 } ]
                        [INCRNUMREC = { records | calculated } ]
                        [INCRRECLEN = { bytes | calculated } ]
                        [OUTPUT = XML]
                        [LOBGROUP]
                        [EXPGROUP]
                        [ERRLIM = { error-threshold-count | 1 } ]
                    [NOUSERABEND]
                    [TEST]
                    [ABEND34]
```

ADAFRM: Format Adabas Database Components

To format the Associator (ASSO) or Data Storage (DATA) data sets, use this syntax:

```
ADAFRM {ASSOFRM | DATAFRM}  SIZE = size
                            [DEVICE = device-type ]
                            [ { FROMRABN = { starting-rabn | NEXT } |
                                NUMBER = { dataset-number |  1 } } ]
                            [NOTENH]
                            [NOUSERABEND]
                            [VOLIOCOUNT = nnn | 4 ]
```

To format the Work (WORK), command log (CLOG), protection log (PLOG), or sort (SORT) data sets, use this syntax:

```
ADAFRM  { WORKFRM | CLOGFRM | PLOGFRM | SORTFRM }
                    SIZE = size
                    [DEVICE = device-type ]
                    [ { FROMRABN = starting-rabn  |  NUMBER = {dataset-number |  1 } } ]
                    [NOTENH]
                    [NOUSERABEND]
                    [VOLIOCOUNT = nnn | 4 ]
```

To format the recovery log (RLOG), use this syntax:

```
ADAFRM  RLOGFRM  SIZE = size
                 [DEVICE = device-type ]
                 [NOTENH]
                 [NOUSERABEND]
                 [VOLIOCOUNT = nnn | 4 ]
```

To format the Temp (TEMP) data set, use this syntax:

```
ADAFRM  TEMPFRM  SIZE = size
                 [DEVICE = device-type ]
                 [FROMRABN =  starting-rabn ]
                 [NOTENH]
                 [NOUSERABEND]
                 [VOLIOCOUNT = nnn | 4 ]
```

To reformat blocks of an existing Associator, Data Storage, or Work data set, use this syntax:

```
ADAFRM  { ASSORESET | DATARESET | WORKRESET }
                    SIZE = size
                    FROMRABN = start-rabn
                    [NOTENH]
                    [NOUSERABEND]
                    [VOLIOCOUNT = nnn | 4 ]
```

ADAINV COUPLE: Define File-Coupling Descriptors

```
ADAINV  COUPLE  FILES = file-number1 , file-number2
                DESCRIPTOR = ' fieldname , fieldname '
                SORTSIZE = size
                TEMPSIZE = size
                [LPB = prefetch-buffer-size ]
                [LWP = { workpool-size | 1048576 } ]
                [NOUSERABEND]
                [PASSWORD = ' password ' ]
                [SORTDEV = device-type ]
                [TEMPDEV = device-type ]
                [TEST]
```

ADAINV INVERT: Create Descriptors

```
ADAINV  INVERT  FILES = file-num
                SORTSIZE = size
                TEMPSIZE = size
                [FIELD = ' field-name [ , option ]... ' ] ...
                [COLDE = ' num , name [ , UQ [, XI ] ] = parent-field ' ]
                [HYPDE = ' num , name , length , format [ , option ]... = parent-field , ...' ]
                [PHONDE = ' name ( field-name )' ]
                [SUBDE = ' name [, UQ [, XI ] ] = parent-field ( begin , end )' ]
                [SUPDE = ' name [, UQ [, XI ] ] = { parent-field ( begin , end ) } , ...' ]
                [CODE = cipher-code ]
                [LPB = prefetch-buffer-size ]
                [LWP = { workpool-size | 1048576 } ]
                [NOUSERABEND]
                [PASSWORD = ' password ' ]
                [SORTDEV = device-type ]
                [TEMPDEV = device-type ]
                [TEST]
```

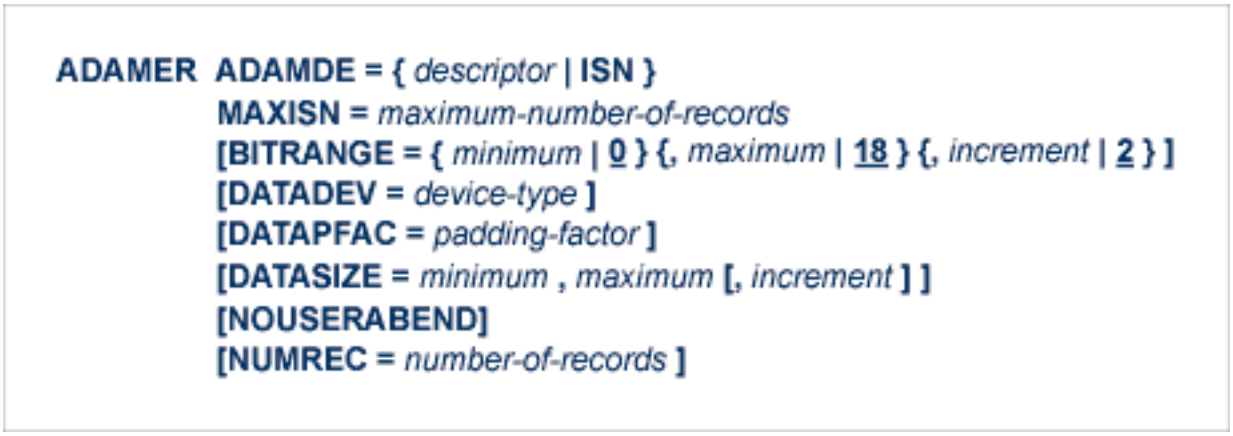
ADALOD LOAD: Load a File

```
ADALOD LOAD  FILE = file-number [ , filetype ]
             DSSIZE = size
             MAXISN = max-number-of-records [MAXISN2 = max-number-of-secondary-spanned-records ]
             SORTSIZE = size
             TEMPSIZE = size
             [ACRABN = starting-rabn ] [AC2RABN = starting-rabn ]
             [ADAMFILE ADAMDE = { field | ISN } [ADAMOFLOW = size ] [ADAMPARM = { number | 0 } ] ]
             [ALLOCATION = { FORCE | NOFORCE } ]
             [ANCHOR = file-number MINISN = lowest-allocated-isn , NOACEXTENSION ]
             [ASSOPFAC = { padding-factor | 10 } ] [ASSOVOLUME = ' Associator-extent-volume ' ]
             [{BASEFILE | LOBFILE} = file-number ]
             [DATAFRM = { YES | NO }]
             [DATAPFAC = { padding-factor | 10 } ] [DATAVOLUME = ' Data-Storage-extent-volume ' ]
             [DSDEV = device-type ] [DSRABN = start-rabn ] [DSREUSE = { YES | NO }]
             [ETID = owner-id ]
             [IGNFDT]
             [INDEXCOMPRESSION = { YES | NO }]
             [ISNREUSE = { YES | NO ] [ISNSIZE = { 3 | 4 } ]
             [LIP = { isn-pool-size | 2000 } ]
             [LOWNERID = { owner-id-length | 0 } ]
             [LWP = { work-pool-size | 1048576 } ]
             [MAXDS = max-DS-secondary-allocation ]
             [MAXNI = max-NI-secondary-allocation ]
             [MAXRECL = max-compressed-record-length ]
             [MAXUI= max-UI-secondary-allocation ]
             [MINISN = { lowest-allocated-isn | 1 } ]
             [MIXDSDEV]
             [NAME = { name | TESTFILE } ]
             [NIRABN = start-rabn ] [NISIZE = size ]
             [NOACEXTENSION]
             [NOUSERABEND]
             [NUMREC = max-number-of-records-to-load ]
             [PGMREFRESH = { YES | NO } ]
             [READONLY = { YES | NO } ]
             [REPLICATOR]
             [RESTART]
             [ RPLTARGETID = ' reptor-target-id '
                 [RPLDSBI]
                 [RPLERRORDEACTFILE = { NO | YES} ]
                 [RPLINITERROR = { FAIL | CONTINUE} ]
                 [RPLKEY = ' primary-key-for-replication ' ]
                 [RPLLOAD = { YES | FILE | NO } ] ]
             [RPLUPDATEONLY = { YES | NO } ]
             [SKIPREC = { number | 0 } ]
             [SLOG]
             [SORTDEV = device-type ]
             [SYFMAXUV = nn ]
             [TEMPDEV = device-type ]
             [TEST]
             [UIRABN = start-rabn ] [UISIZE= size ]
             [UQDE = descriptor-list ]
             [USERISN = { YES | NO } ]
             [VERSION = { 4 | 5 | 6 | 7 } ]
```

ADALOD UPDATE: Add/Delete Records

```
ADALOD UPDATE   FILE = file-number
                SORTSIZE = size
                TEMPSIZE = size
                [DDISN]
                [DELISN = isn-list ]
                [DSREUSE = { YES | NO } ]
                [ETID = multiclient-file-owner-id ]
                [ISNREUSE = { YES | NO } ]
                [LIP = { isn-pool-size | 2000 } ]
                [LWP = { work-pool-size | 1048576 } ]
                [MAXISN = number
                    [ACRABN = starting-rabn ]
                    [ASSOVOLUME = 'Associator-extent-volume' ] ]
                [MAXISN2 = number
                    [AC2RABN = starting-rabn]
                    [ASSOVOLUME = 'Associator-extent-volume' ] ]
                [NOUSERABEND]
                [NUMREC = number]
                [PASSWORD = 'password ' ]
                [RESTART]
                [RPLLOAD = { YES | NO } ]
                [SAVEDREC]
                [SKIPREC = {number | 0 } ]
                [SORTDEV = device-type ]
                [TEMPDEV = device-type ]
                [TEST]
                [USERISN = { YES | NO } ]
```

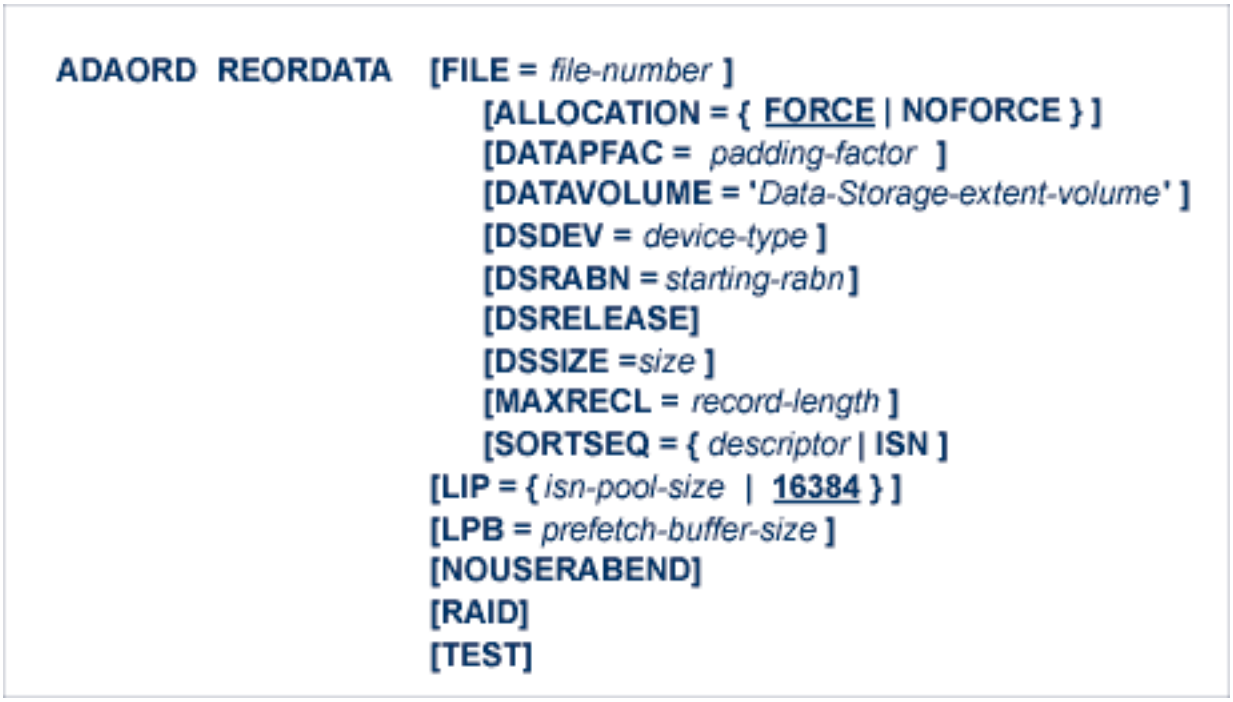
ADAMER Utility: ADAM Estimation



ADAORD REORASSO: Reorder Associator

```
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 ]
                  [MAXFILES = maximum-number-files ]
                  [NEWDBID = database-identifier ]
                  [NEWDBNAME = database-name]
                  [NOUSERABEND]
                  [RAID]
                  [RPLUPDATEONLY = { YES | NO ]
                  [TEST]
```

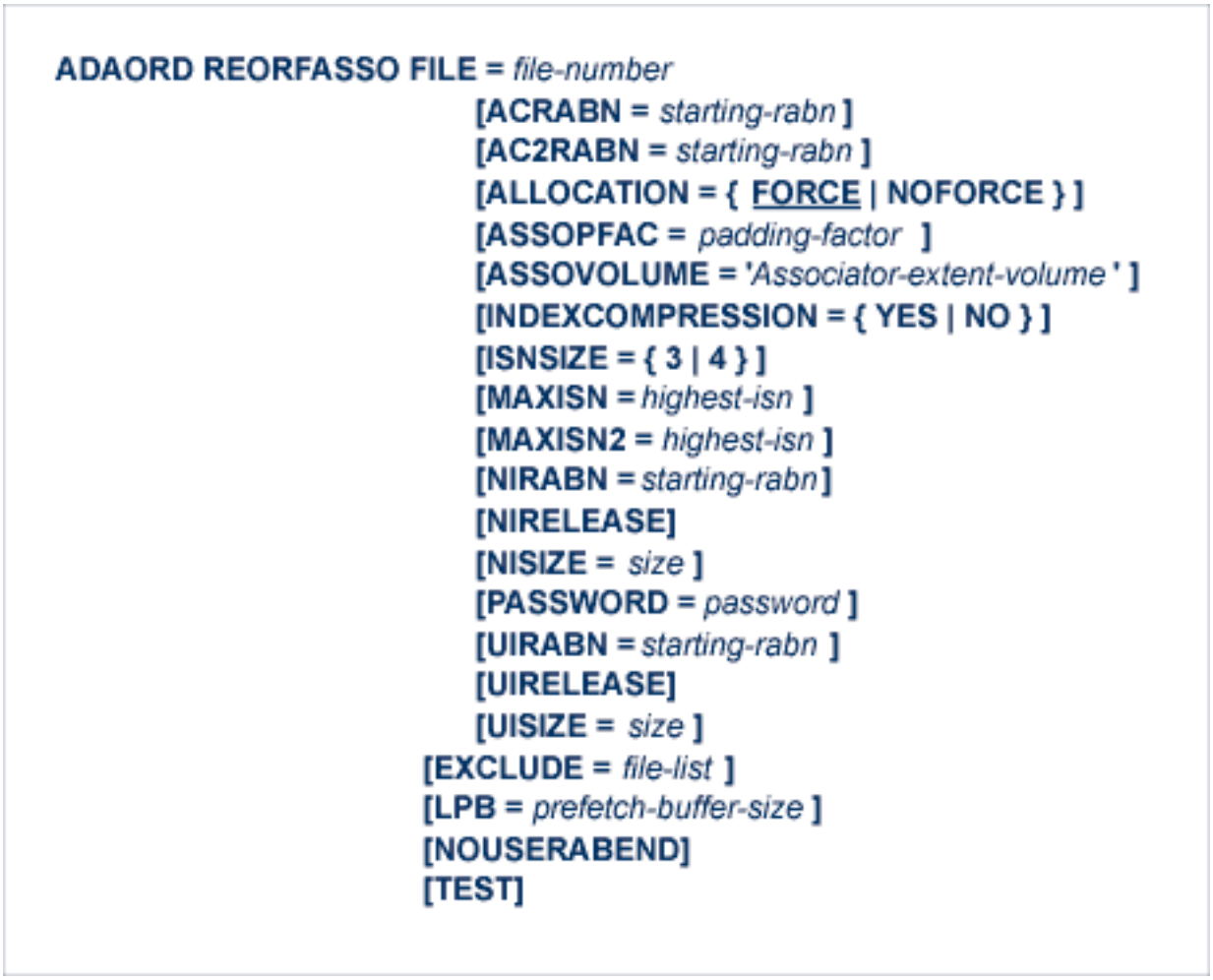
ADAORD REORDATA: Reorder Data Storage



ADAORD REORDB: Reorder Database

```
ADAORD  REORDB    [DBINDEXCOMPRESSION = { YES | NO } ]
                  [FILE = file-number ]
                      [ACRABN = starting-rabn ]
                      [AC2RABN = starting-rabn ]
                      [ALLOCATION = { FORCE | NOFORCE } ]
                      [ASSOPFAC = padding-factor  ]
                      [ASSOVOLUME = 'Associator-extent-volume ' ]
                      [DATAPFAC =  padding-factor  ]
                      [DATAVOLUME = 'Data-Storage-extent-volume' ]
                      [DSDEV = device-type ]
                      [DSRABN = starting-rabn]
                      [DSRELEASE]
                      [DSSIZE =size ]
                      [INDEXCOMPRESSION = { YES | NO } ]
                      [ISNSIZE = { 3 | 4 } ]
                      [MAXISN = highest-isn ]
                      [MAXISN2 = highest-isn ]
                      [MAXRECL = record-length ]
                      [NIRABN = starting-rabn]
                      [NIRELEASE]
                      [NISIZE =  size ]
                      [SORTSEQ = { descriptor | ISN ]
                      [UIRABN = starting-rabn ]
                      [UIRELEASE]
                      [UISIZE =  size ]
                  [LIP = { isn-pool-size  |  16384 } ]
                  [LPB = prefetch-buffer-size ]
                  [MAXFILES =  maximum-number-files ]
                  [NEWDBID = database-identifier ]
                  [NEWDBNAME =  database-name]
                  [NOUSERABEND]
                  [RAID]
                  [TEST]
```

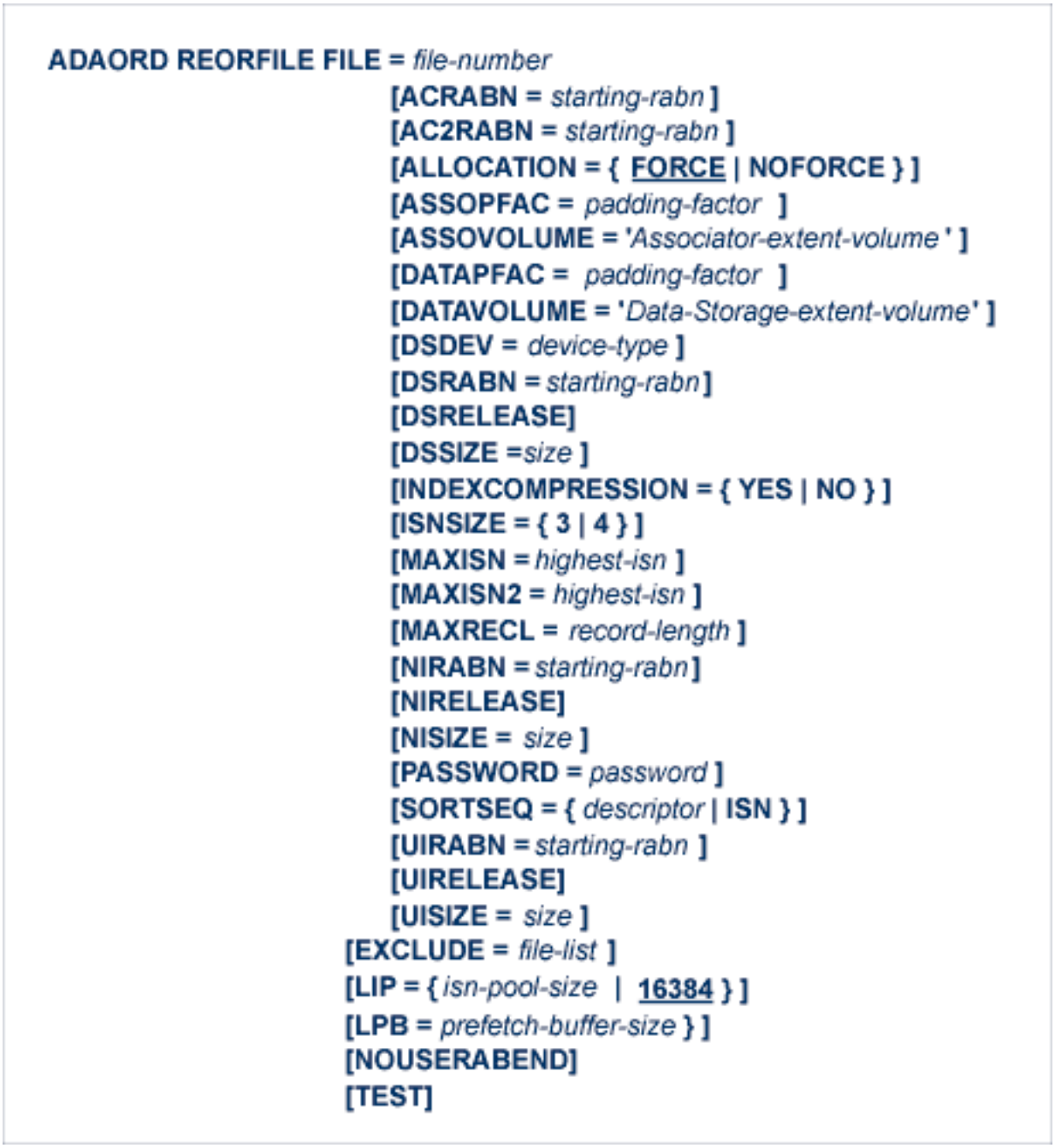
ADAORD REORFASSO: Reorder Associator for a Single File



ADAORD REORFDATA: Reorder Data Storage for a Single File

```
ADAORD REORFDATA FILE = file-number
                        [ALLOCATION = { FORCE | NOFORCE } ]
                        [DATAPFAC =  padding-factor  ]
                        [DATAVOLUME = 'Data-Storage-extent-volume' ]
                        [DSDEV = device-type ]
                        [DSRABN = starting-rabn]
                        [DSRELEASE]
                        [DSSIZE =size ]
                        [MAXRECL =  record-length ]
                        [PASSWORD = password ]
                        [SORTSEQ = { descriptor | ISN } ]
                      [EXCLUDE = file-list ]
                      [LIP = { isn-pool-size  |  16384 } ]
                      [LPB = prefetch-buffer-size ]
                      [NOUSERABEND]
                      [TEST]
```

ADAORD REORFILE: Reorder File


ADAORD REORFILE FILE = file-number
[ACRABN = starting-rabn]
[AC2RABN = starting-rabn]
[ALLOCATION = { FORCE | NOFORCE }]
[ASSOPFAC = padding-factor]
[ASSOVOLUME = 'Associator-extent-volume ']
[DATAPFAC = padding-factor]
[DATAVOLUME = 'Data-Storage-extent-volume']
[DSDEV = device-type]
[DSRABN = starting-rabn]
[DSRELEASE]
[DSSIZE =size]
[INDEXCOMPRESSION = { YES | NO }]
[ISNSIZE = { 3 | 4 }]
[MAXISN = highest-isn]
[MAXISN2 = highest-isn]
[MAXRECL = record-length]
[NIRABN = starting-rabn]
[NIRELEASE]
[NISIZE = size]
[PASSWORD = password]
[SORTSEQ = { descriptor | ISN }]
[UIRABN = starting-rabn]
[UIRELEASE]
[UISIZE = size]
[EXCLUDE = file-list]
[LIP = { isn-pool-size | 16384 }]
[LPB = prefetch-buffer-size }]
[NOUSERABEND]
[TEST]

ADAORD RESTRUCTUREDB: Restructure Database

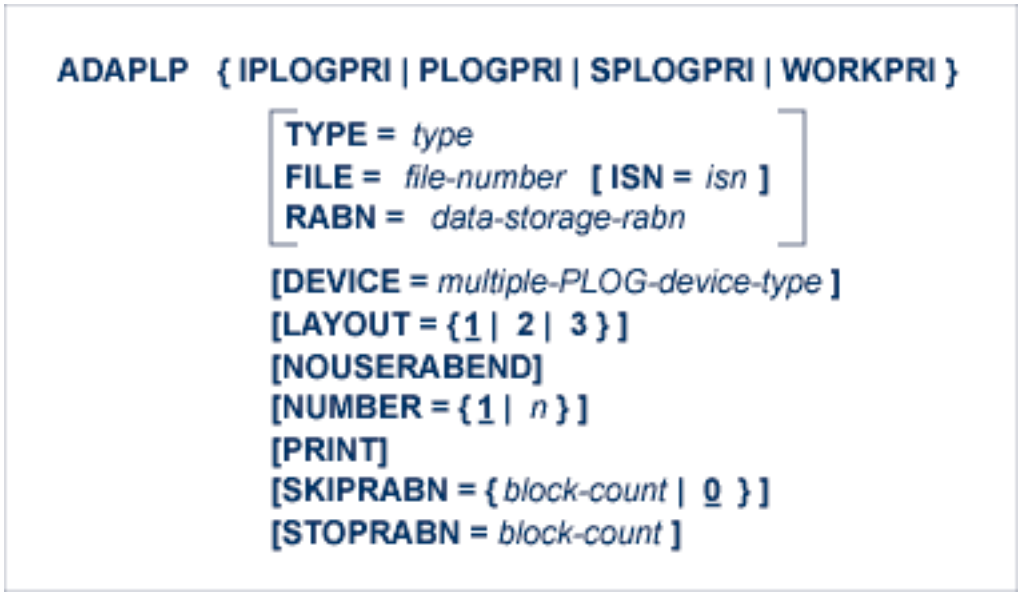
```
ADAORD  { RESTRUCTUREDB | REDB }
                [DBASSODEV = { device-type ]
                [DBDATADEV = { device-type ]
                [DBINDEXCOMPRESSION = { YES | NO } ]
                [FILE = file-number ]
                    [ASSOPFAC = padding-factor ]
                    [ASSODEV = device-type ] [DATADEV = device-type ]
                    [DATAPFAC = padding-factor ]
                    [INDEXCOMPRESSION = { YES | NO } ]
                    [ISNSIZE = { 3 | 4 } ]
                    [SORTSEQ = { descriptor | ISN } ]
                [LPB = prefetch-buffer-size ]
                [NOUSERABEND]
                [TEST]
```

ADAORD RESTRUCTUREF: Restructure Single Files

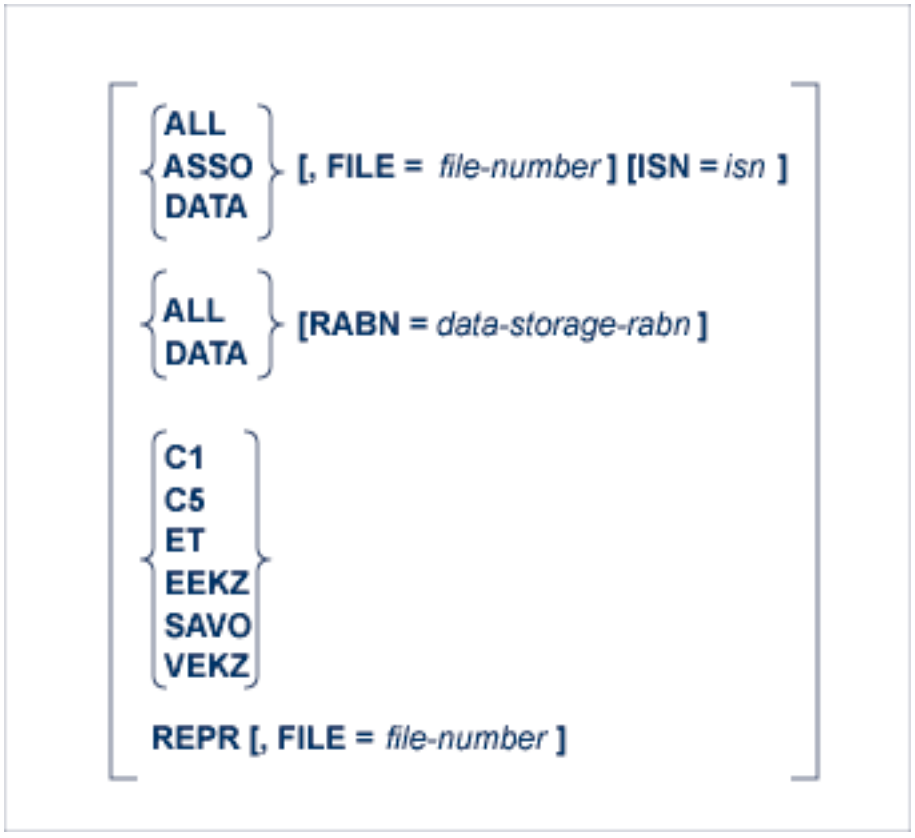
```
ADAORD  { RESTRUCTUREF | REF }
                    FILE = file-number
                        [ASSODEV = device-type ]
                        [ASSOPFAC = padding-factor ]
                        [DATADEV = device-type ]
                        [DATAPFAC = padding-factor ]
                        [DBASSODEV = device-type ]
                        [DBDATADEV = device-type ]
                        [INDEXCOMPRESSION = { YES | NO } ]
                        [ISNSIZE = { 3 | 4 } ]
                        [PASSWORD = password ]
                        [SORTSEQ = { descriptor | ISN } ]
                    [LPB = prefetch-buffer-size } ]
                    [NOUSERABEND]
                    [TEST]
```

ADAORD STORE: Store Files

ADAPLP: Print Data Protection Records from PLOG/Work



where *type* is one of the following:



ADARAI CHKDB: Check the Database Recovery Status

```
ADARAI   CHKDB   [ { ACTIVE | INACTIVE } ]
```

ADARAI DISABLE: Deactivate Recovery Logging

```
ADARAI  DISABLE
```

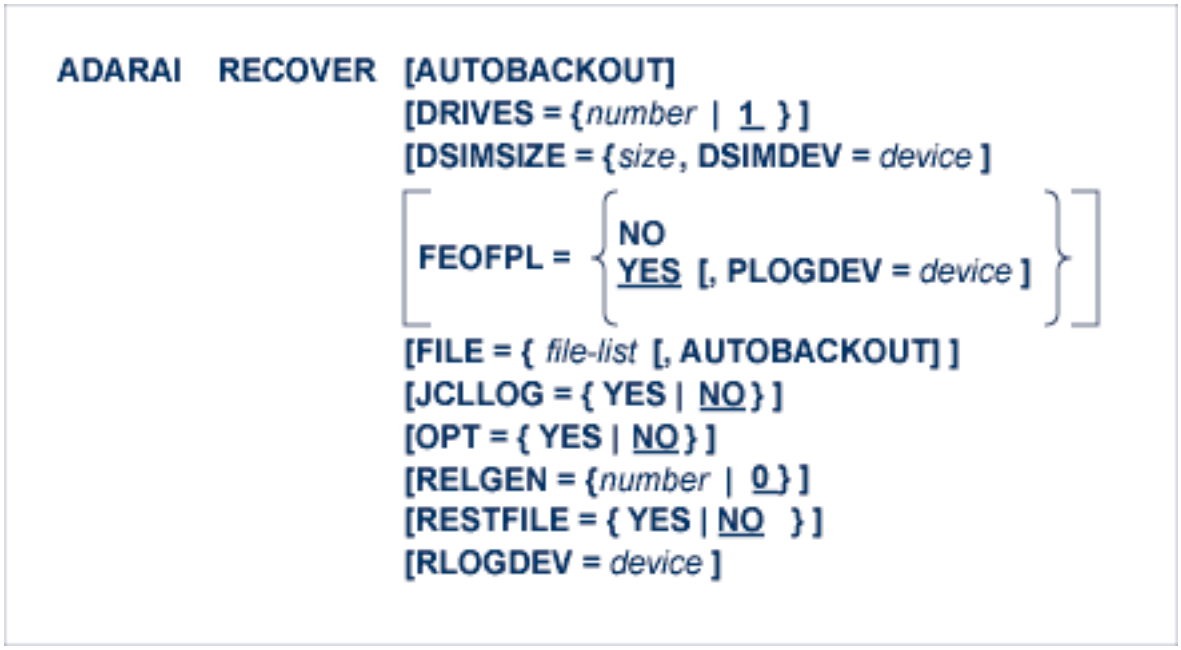
ADARAI LIST: Display Current RLOG Generations

```
ADARAI   LIST   [GENS = { NO | YES } ]
                [RELGEN = { gen-number | gen-number - gen-number } ]
                [RLOGDEV = device ]
```

ADARAI PREPARE: Initialize and Start the RLOG

```
ADARAI   PREPARE   RLOGSIZE =  size
                   [RLOGDEV = device ]
                   [MINGENS = { count  | 4 } ]
```

ADARAI RECOVER: Build a Recovery Job Stream



ADARAI REMOVE: Remove the Recovery Aid

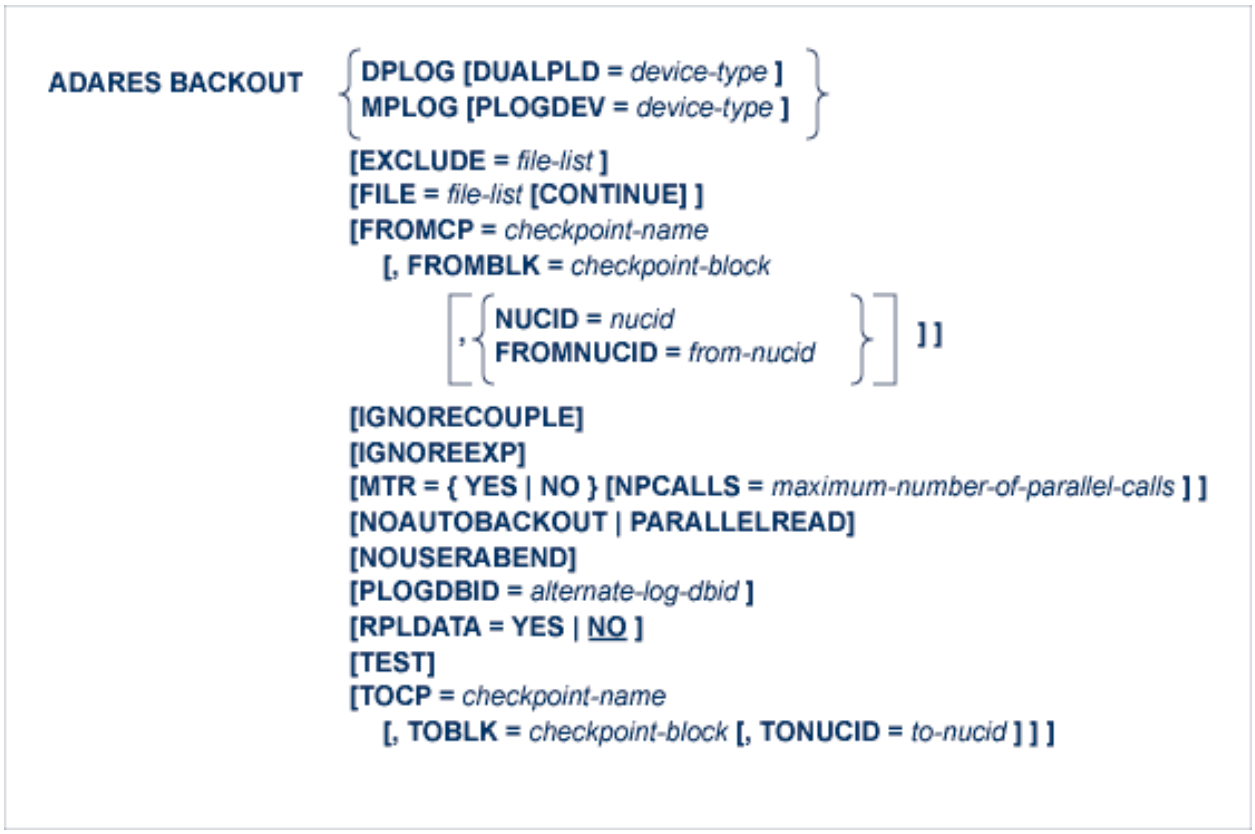
ADAREP: Request Database Status Report

```
ADAREP  [REPORT]
        [ {CPEXLIST [, OFFSET = {column-number | 63} ] | CPLIST }
            [FROMDATE = yyyymmdd ] [TODATE = yyyymmdd ]
            [FROMSESSION = session ] [TOSESSION = session ]
            [CP=' keyword,... ']]
        [ {FILE = file-list [, LAYOUT = 1 ] | NOFILE } ]
        [LIMCOUNT | NOCOUNT]
        [NOFDT]
        [NOPPT]
        [ { NOLGLIST | NOPHLIST | NOSTD } ]
        [NOUSERABEND] }
        [PRINT={ON|OFF}]
        [SAVETAPE
            [PLOGNUM = protection-log-number [ { SYN1 | SYN4 } = PLOG-block-number ] ] ]
        [OUTPUT='XML[,UTF8]']
            [ACODE= '{ GCB | dbcodepg } [ ,{ GCB | FCB | fncodepg } ] [ ,{ GCB | cpcodepg } ] ']
```

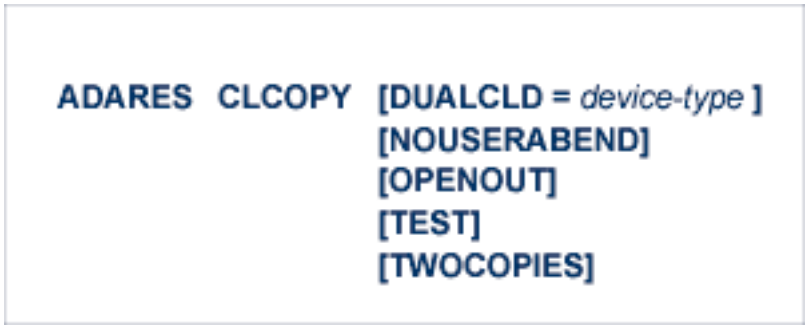
ADARES BACKOUT SIBA: Back Out Updates Using the Sequential Protection Log (SIBA)

```
ADARES BACKOUT  { PLOGNUM = protection-log-number
                { FROMPLOG = start-session [, TOPLOG = stop-session ] }
                [EXCLUDE = file-list ]
                [FILE = file-list [CONTINUE] ]
                [FROMCP = checkpoint-name
                    [, FROMBLK = checkpoint-block
                        [ , { NUCID = nucid
                            { FROMNUCID = from-nucid } ] ] ]
                [IGNORECOUPLE]
                [IGNOREEXP]
                [MTR = { YES | NO } [NPCALLS = maximum-number-of-parallel-calls ] ]
                [NOAUTOBACKOUT | PARALLELREAD]
                [NOUSERABEND]
                [PLOGDBID = alternate-log-dbid ]
                [RPLDATA = YES | NO ]
                [TEST]
                [TOCP = checkpoint-name
                    [, TOBLK = checkpoint-block [, TONUCID = to-nucid ] ] ]
```

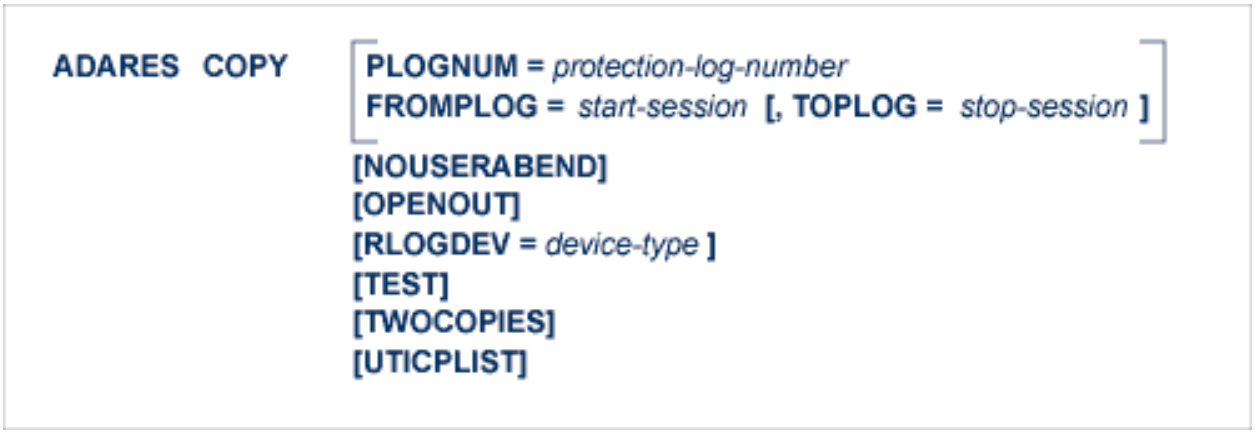
ADARES BACKOUT DPLOG or MPLOG: Back Out Updates Using the Dual or Multiple Protection Log



ADARES CLCOPY: Copy Dual Command Log

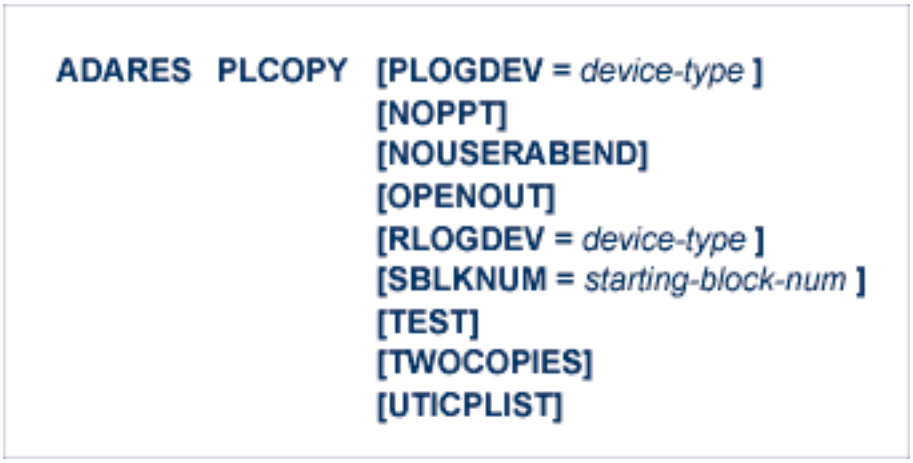


ADARES COPY: Copy a Sequential Protection Log or Save Tape

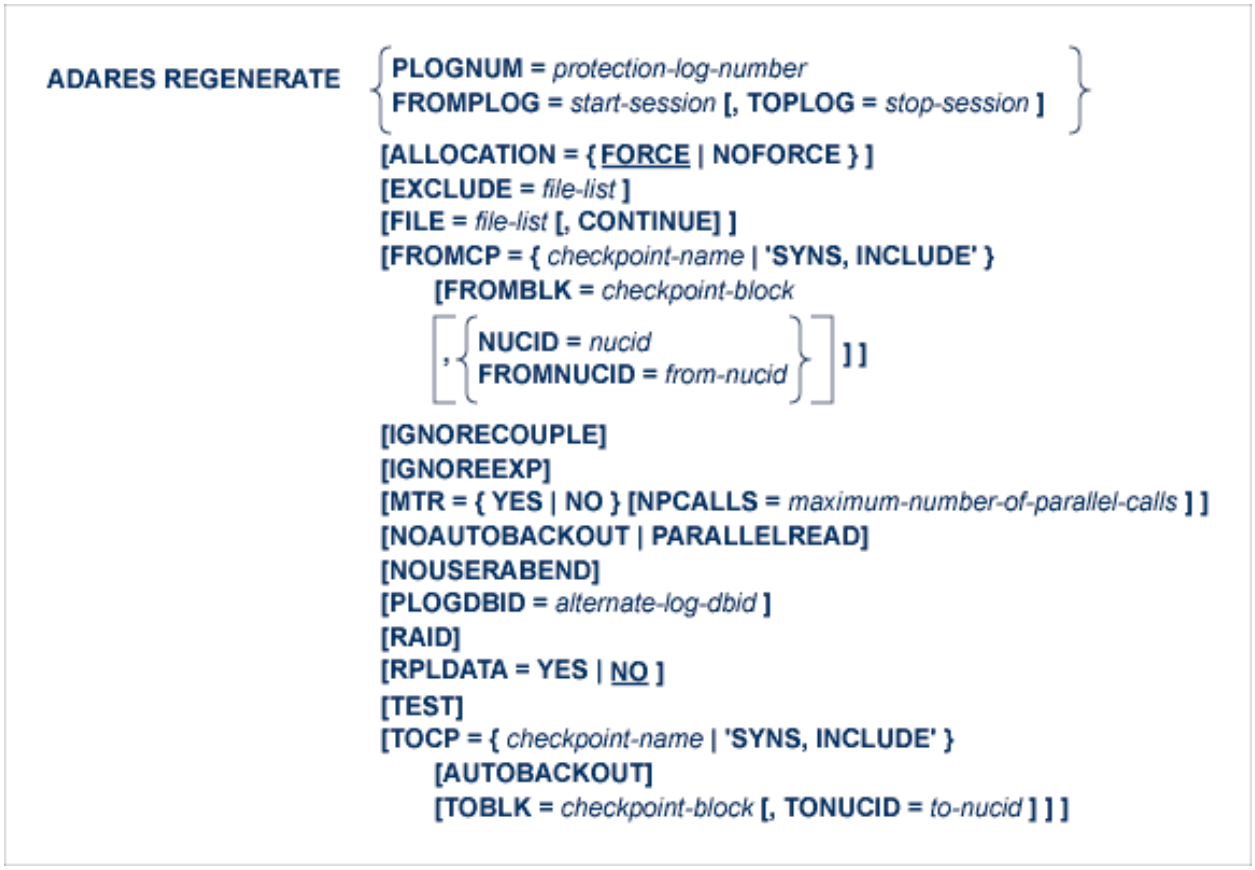


ADARES MERGE CLOG: Merge Nucleus Cluster Command Logs

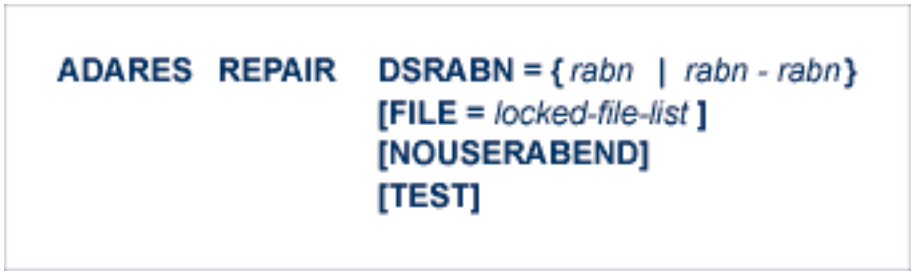
ADARES PLCOPY: Copy Protection Log to Sequential Data Set



ADARES REGENERATE: Regenerate Updates



ADARES REPAIR: Repair Data Storage Blocks



ADASAV RESTONL: Restore Database from Online Source

```
ADASAV RESTONL  [BUFNO = { number-of-buffers | 1 } ]
                [CLOGDEV = CLOG1-device-type ]
                [DRIVES = { count | 1 } ]
                [EXCLUDE = file-list ]
                [NEWDBID = new-database-id ]
                [NEWDBNAME = new-database-name ]
                [NOUSERABEND]
                [OVERWRITE]
                [PLOGDEV = PLOG-device-type ]
                [PLOGNUM = PLOG-number [, SYN1 = PLOG-block-number ] ]
                [TEST]
```

ADASAV RESTONL FILES: Restore Files to Original RABNs from Online Source

```
ADASAV RESTONL FILES = file-list   [ALLOCATION = { FORCE | NOFORCE } ]
                                   [BUFNO = { number-of-buffers | 1 } ]
                                   [DRIVES = { count | 1 } ]
                                   [EXCLUDE = file-list ]
                                   [NEWFILES = file-list ]
                                   [NOUSERABEND]
                                   [OVERWRITE]
                                   [PASSWORD = ' password-list ' ]
                                   [PLOGNUM = protection-log-number ]
                                       [ { SYN1 | SYN4 } = PLOG-block-number ]
                                   [READONLY = ' ro-file-list ' ]
                                   [RPLACTIVE = ' inactive-flag-file-list ' ]
                                   [RPLDATA = ' restore-data-to-be-sent-file-list ' ]
                                   [RPLDSBI = ' before-image-file-list ' ]
                                   [RPLKEY = ' primary-key-file-list ' ]
                                   [RPLTARGETID = ' target-ID-file-list ' ]
                                   [RPLUPDATEONLY = ' upd-only-file-list ' ]
                                   [TEST]
```

ADASAV RESTONL FMOVE: Restore Files to Any RABNs from Online Source

```
ADASAV RESTONL FMOVE = file-list   [ACRABN = AC-start-rabn-list ]
                                   [AC2RABN = AC2-start-rabn-list ]
                                   [ALLOCATION = { FORCE | NOFORCE } ]
                                   [ASSOVOLUME = ' Associator-extent-volume ' ]
                                   [BUFNO = { number-of-buffers | 1 } ]
                                   [DATAVOLUME = ' Data-Storage-extent-volume ' ]
                                   [DRIVES = { count | 1 } ]
                                   [DSRABN = DS-start-rabn-list ]
                                   [DSSIZE = DS-size-list ]
                                   [EXCLUDE = file-list ]
                                   [MAXISN = isn-count-list ]
                                   [MAXISN2 = isn-count-list ]
                                   [NEWFILES = file-list ]
                                   [NIRABN = NI-start-rabn-list ]
                                   [NISIZE = NI-size-list ]
                                   [NOUSERABEND]
                                   [OVERWRITE]
                                   [PASSWORD = ' password-list ' ]
                                   [PLOGNUM = protection-log-number ]
                                       [ { SYN1 | SYN4 } = PLOG-block-number ]
                                   [READONLY = ' ro-file-list ' ]
                                   [RPLACTIVE = ' inactive-flag-file-list ' ]
                                   [RPLDATA = ' restore-data-to-be-sent-file-list ' ]
                                   [RPLDSBI = ' before-image-file-list ' ]
                                   [RPLKEY = ' primary-key-file-list ' ]
                                   [RPLTARGETID = ' target-ID-file-list ' ]
                                   [RPLUPDATEONLY = ' upd-only-file-list ' ]
                                   [TEST]
                                   [UIRABN = UI-start-rabn-list ]
                                   [UISIZE = UI-size-list ]
```

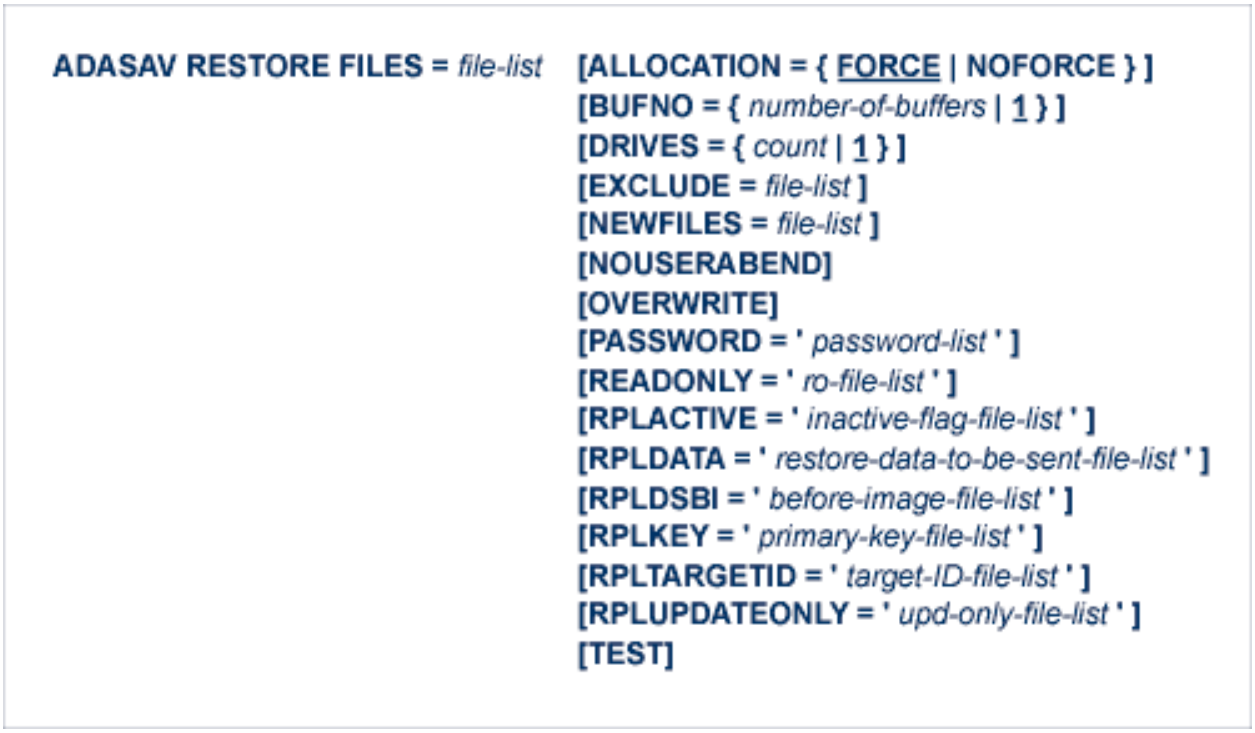
ADASAV RESTONL GCB: Restore Database Incremental from Online Source

```
ADASAV RESTONL GCB  [BUFNO = { number-of-buffers | 1 } ]
                    [CLOGDEV = CLOG1-device-type ]
                    [DRIVES = { count | 1 } ]
                    [EXCLUDE = file-list ]
                    [FILES = file-list ]
                    [NEWDBID = new-database-id ]
                    [NEWDBNAME = new-database-name ]
                    [NOUSERABEND]
                    [OVERWRITE]
                    [PLOGDEV = PLOG-device-type ]
                    [PLOGNUM = PLOG-number [, SYN1 = PLOG-block-number ] ]
                    [READONLY = ' ro-file-list ' ]
                    [RPLACTIVE = ' inactive-flag-file-list ' ]
                    [RPLDATA = ' restore-data-to-be-sent-file-list ' ]
                    [RPLDSBI = ' before-image-file-list ' ]
                    [RPLKEY = ' primary-key-file-list ' ]
                    [RPLTARGETID = ' target-ID-file-list ' ]
                    [RPLUPDATEONLY = ' upd-only-file-list ' ]
                    [TEST]
```

ADASAV RESTORE: Restore Database from Offline Source

```
ADASAV RESTORE  [BUFNO = { number-of-buffers | 1 } ]
                [CLOGDEV = CLOG1-device-type ]
                [DRIVES = { count | 1 } ]
                [EXCLUDE = file-list ]
                [NEWDBID = new-database-id ]
                [NEWDBNAME = new-database-name ]
                [NOUSERABEND]
                [OVERWRITE]
                [PLOGDEV = PLOG-device-type ]
                [TEST]
```

ADASAV RESTORE FILES: Restore Files to Original RABNs from Offline Source



ADASAV RESTORE FMOVE: Restore Files to Any RABNs from Offline Source

```
ADASAV RESTORE FMOVE = file-list  [ACRABN = AC-start-rabn-list ]
                                  [AC2RABN = AC2-start-rabn-list ]
                                  [ALLOCATION = { FORCE | NOFORCE } ]
                                  [ASSOVOLUME = ' Associator-extent-volume ' ]
                                  [BUFNO = { number-of-buffers | 1 } ]
                                  [DATAVOLUME = ' Data-Storage-extent-volume ' ]
                                  [DRIVES = { count | 1 } ]
                                  [DSRABN = DS-start-rabn-list ]
                                  [DSSIZE = DS-size-list ]
                                  [EXCLUDE = file-list ]
                                  [MAXISN = isn-count-list ]
                                  [MAXISN2 = isn-count-list ]
                                  [NEWFILES = file-list ]
                                  [NIRABN = NI-start-rabn-list ]
                                  [NISIZE = NI-size-list ]
                                  [NOUSERABEND]
                                  [OVERWRITE]
                                  [PASSWORD = ' password-list ' ]
                                  [READONLY = ' ro-file-list ' ]
                                  [RPLACTIVE = ' inactive-flag-file-list ' ]
                                  [RPLDATA = ' restore-data-to-be-sent-file-list ' ]
                                  [RPLDSBI = ' before-image-file-list ' ]
                                  [RPLKEY = ' primary-key-file-list ' ]
                                  [RPLTARGETID = ' target-ID-file-list ' ]
                                  [RPLUPDATEONLY = ' upd-only-file-list ' ]
                                  [TEST]
                                  [UIRABN = UI-start-rabn-list ]
                                  [UISIZE = UI-size-list ]
```

ADASAV RESTORE GCB: Restore Database Incremental from Offline Source

```
ADASAV RESTORE GCB  [BUFNO = { number-of-buffers | 1 } ]
                    [CLOGDEV = CLOG1-device-type ]
                    [DRIVES = { count | 1 } ]
                    [EXCLUDE = file-list ]
                    [FILES = file-list ]
                    [NEWDBID = new-database-id ]
                    [NEWDBNAME = new-database-name ]
                    [NOUSERABEND]
                    [OVERWRITE]
                    [PLOGDEV = PLOG-device-type ]
                    [READONLY = ' ro-file-list ' ]
                    [RPLACTIVE = ' inactive-flag-file-list ' ]
                    [RPLDATA = ' restore-data-to-be-sent-file-list ' ]
                    [RPLDSBI = ' before-image-file-list ' ]
                    [RPLKEY = ' primary-key-file-list ' ]
                    [RPLTARGETID = ' target-ID-file-list ' ]
                    [RPLUPDATEONLY = ' upd-only-file-list ' ]
                    [TEST]
```

ADASAV RESTPLOG: Restore Protection Log Only

```
ADASAV RESTPLOG  PLOGNUM = protection-log-number
                 { SYN1 | SYN4 } = starting-block-number
                 [FILES = file-list ]
                     [NEWFILES = file-list ]
                 [NOUSERABEND]
                 [TEST]
```

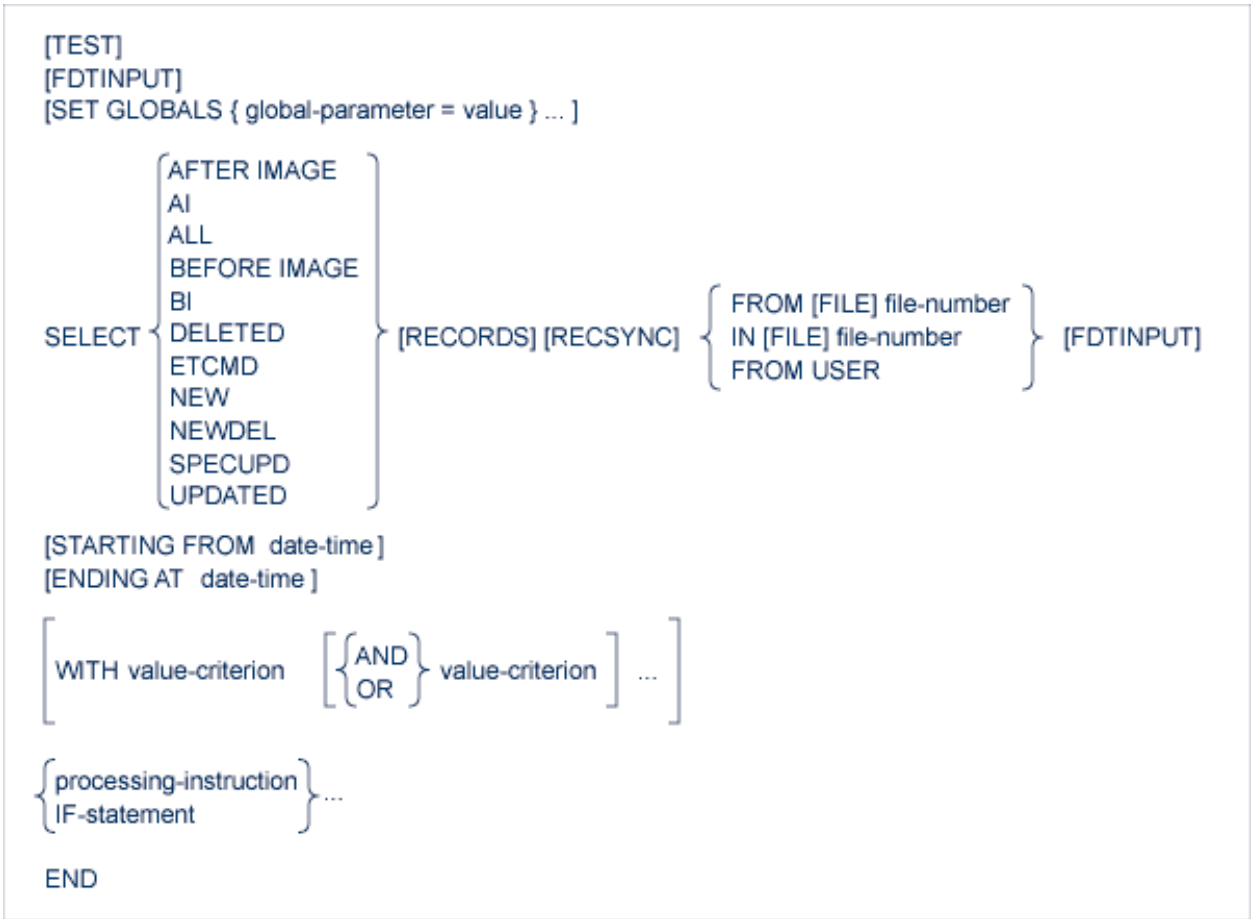
ADASAV SAVE: Save Database

```
ADASAV SAVE   [BUFNO = { number-of-buffers | 1 } ]
              [DRIVES = { count | 1 } ]
              [INCREMENTAL]
              [NOUSERABEND]
              [PERDRIVE = disk-drive-per-tape-drive , ...]
              [TTSYN = seconds ]
              [TWOCOPIES]
              [TEST]
```

ADASAV SAVE FILES: Save Specified Files

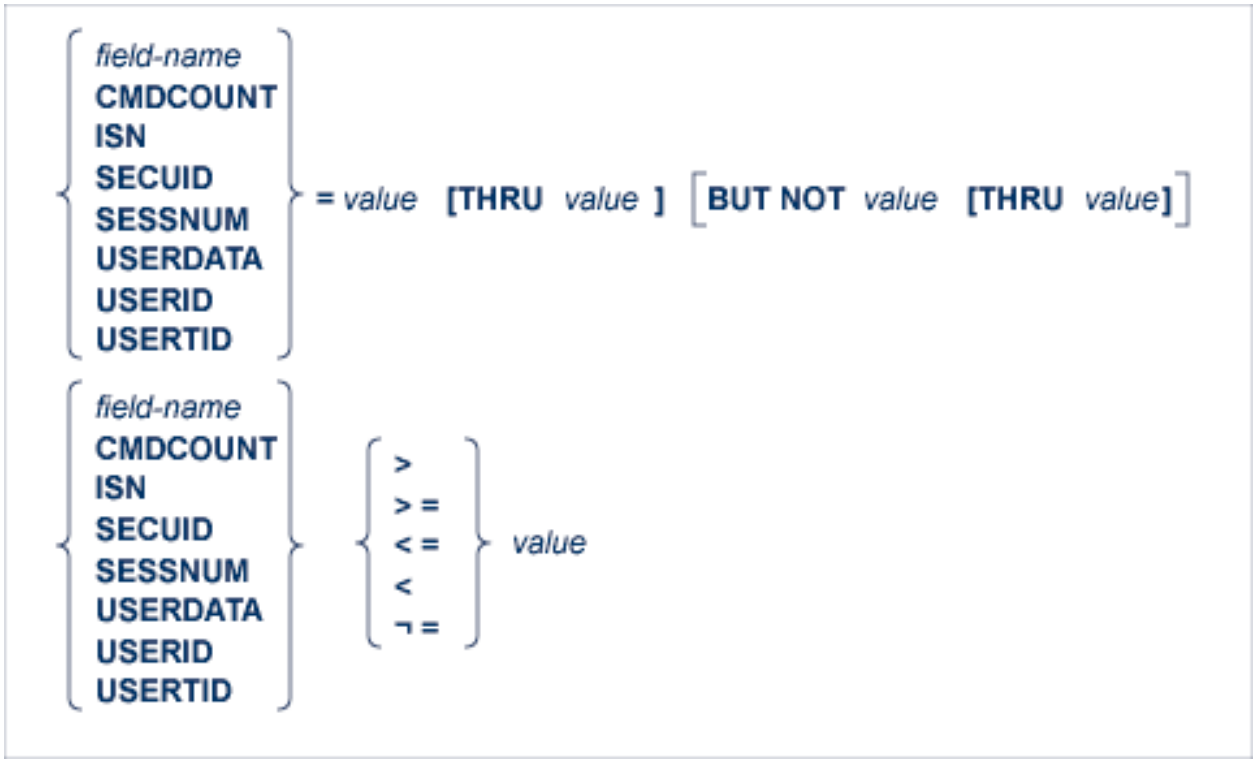
```
ADASAV SAVE FILES = file-list   [BUFNO = { number-of-buffers | 1 } ]
                                [DRIVES = { count | 1 } ]
                                [INCREMENTAL]
                                [NOUSERABEND]
                                [PASSWORD = 'password-list' ]
                                [PERDRIVE = disk-drive-per-tape-drive , ...]
                                [TEST]
                                [TTSYN = seconds ]
                                [TWOCOPIES]
                                [UTYPE = EXU]
```

ADASEL Utility: Select Protection Data

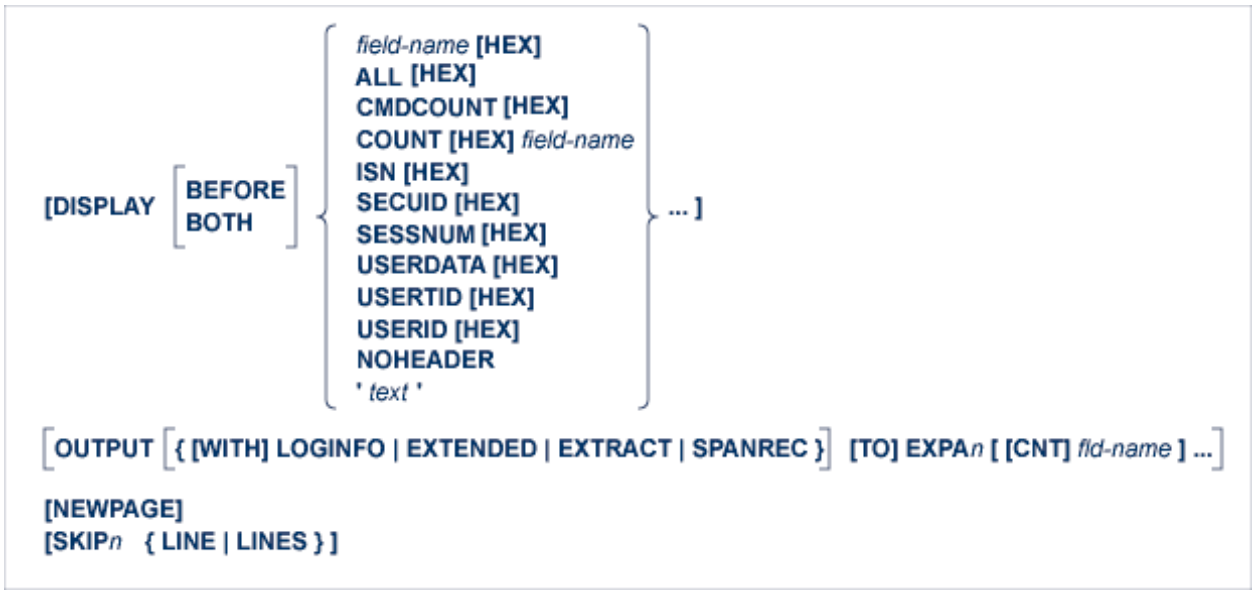


- Value Criterion
- Output Instruction
- IF Processing

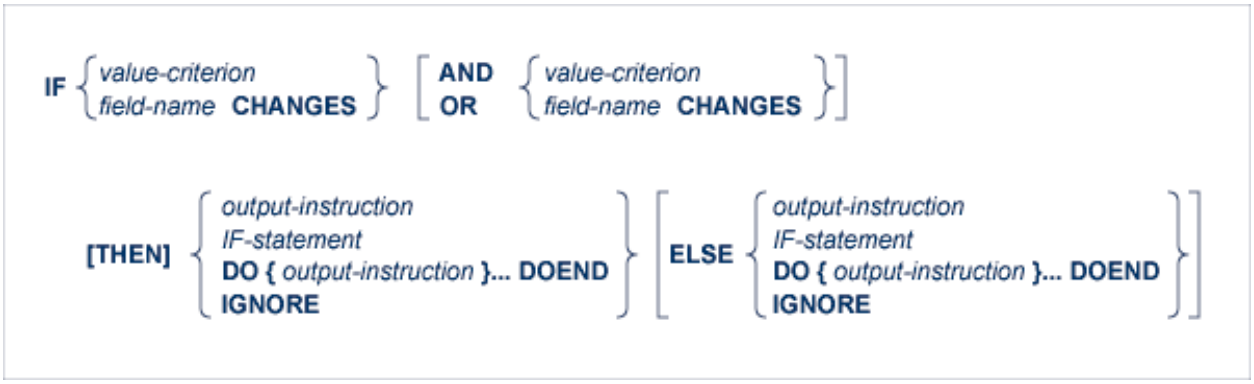
Value Criterion



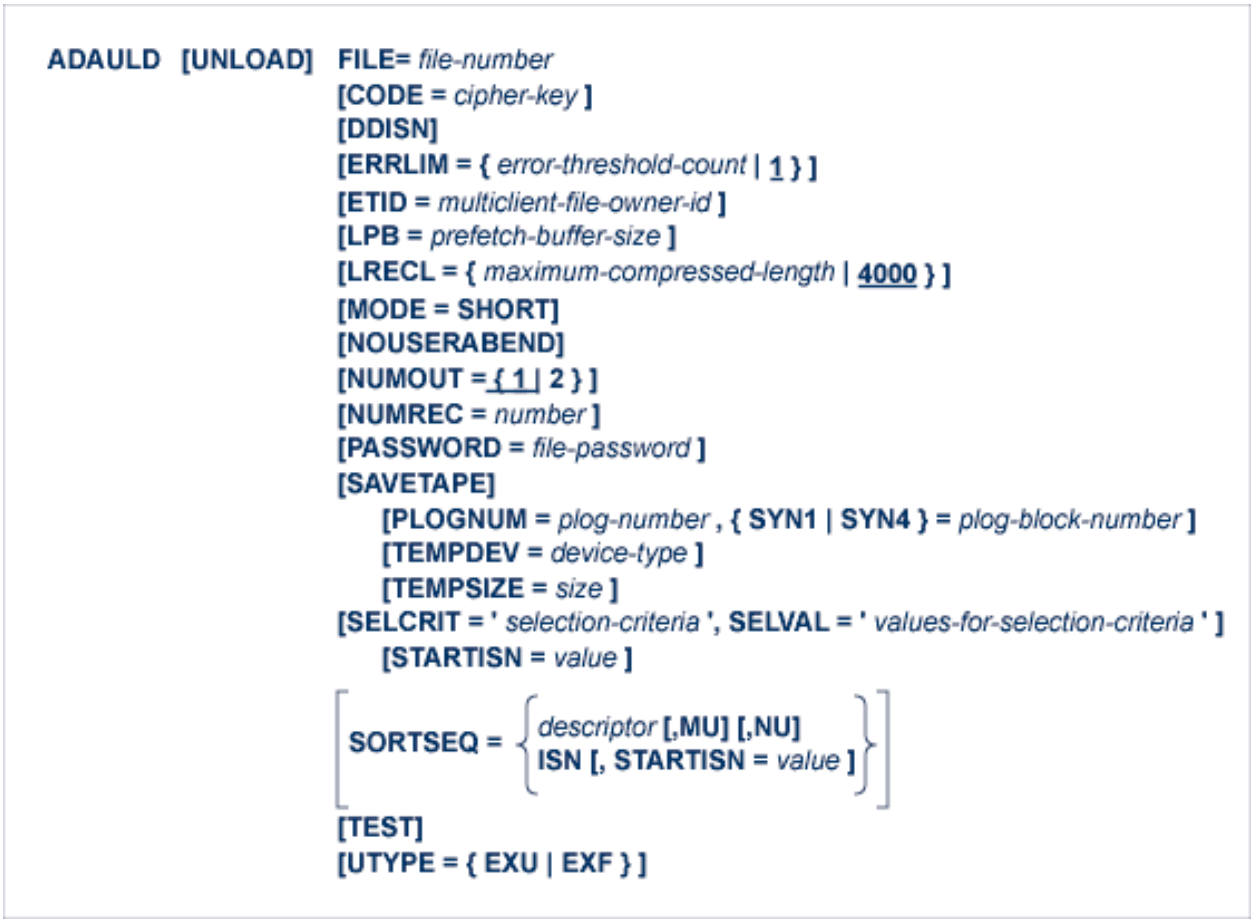
Output Instruction



IF Processing



ADAULD UNLOAD FILE: Unload Specified File



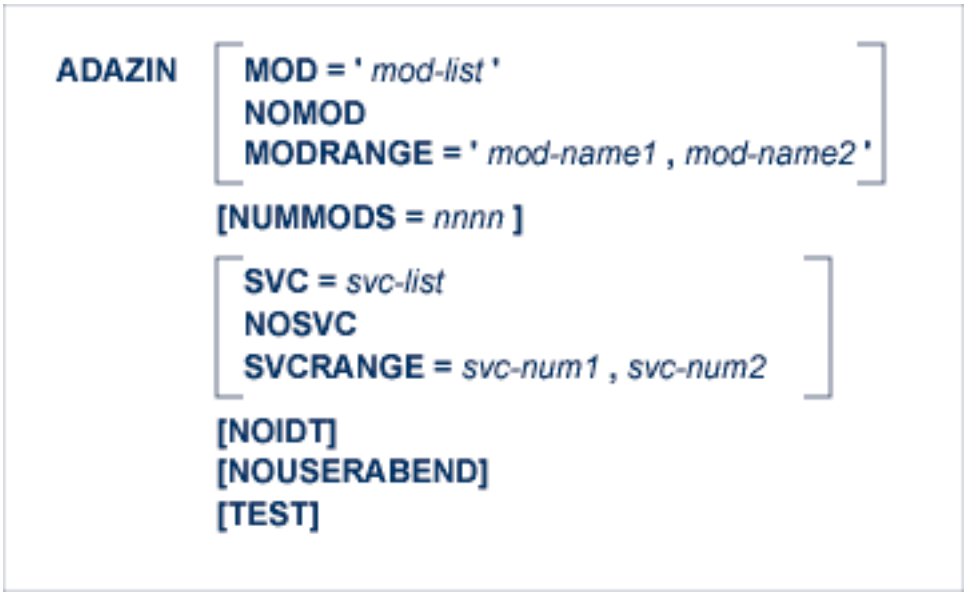
ADAWRK Utility: Work Area Recovery Reports

```
ADAWRK  [ABEND34]
        [CHECKPOINT = {YES | NO }]
        [CMID = id1 [, id2 ] ... [, id24 ] ]
        [ETID = etid1 [, etid2 ] ... [, etid32 ] ]
        [FILES = fn1 [, fn2 ] ... [, fn64 ] ]
        [FORCE = {YES | NO }]
        [LWP = nnnK | 1024K ]
        [NOPPT]
        [NOUSERABEND]
        [REPLICATION = { NO | YES | DETAIL | FULL }]
        [REPORTFILE = {YES | NO }]
        [SECUID = secuid1 [, secuid2 ] ... [, secuid24 ] ]
        [SUMMARY = {NO | YES }]
        [TEST]
        [TIMEZONE = {MACHINE | LOCAL | {+ | -} nn } ]
        [TRANSACTIONS = { NO | YES | DETAIL | FULL} ]
        [USERID = id1 [, id2 ] ... [, id24 ] ]
```

ADAZAP Utility: Display or Modify Asso, Data, and Work Data Sets

```
ADAZAP  MCODE = master-code
        { ASSO | DATA | WORK }
        [LENGTH = length-of-data ]
        [OFFSET = { offset-from-RABN-start | 0 } ]
        [RABN = { rabn-number | 1 } ]
        [REP = replace-data ]
        [VER = verify-data ]
```

ADAZIN Utility: Print Adabas Maintenance and SVC Information



7 Adabas Device Types and Block Sizes

- Supported Adabas Device Types 236

The standard characteristics of the device types supported by Adabas in environments under the z/OS operating systems are summarized here.

Supported Adabas Device Types

The standard characteristics of the device types supported via the ADARUN DEVICE parameter in z/OS environments are summarized in the following table. Adabas block sizes and blocks per track are provided for each Adabas component for each device type.

Device	Trks/Cyl	ASSO	DATA	WORK	PLOG/RLOG	CLOG/ALOG	TEMP/SORT/DSIM	Notes
3390	15	2544:18	5064:10	5724:9	5724:9	5064:10	8904:6	1
8390	15	3440:14	6518:8	10706:5	10706:5	8904:6	8904:6	1
8391	15	4136:12	10796:5	13682:4	13682:4	8904:6	18452:3	1
8392	15	4092:12	12796:4	18452:3	18452:3	18452:3	18452:3	1
8393	15	4092:12	27644:2	27990:2	27990:2	27990:2	27990:2	1
3380	15	2004:19	4820:9	5492:8	5492:8	4820:9	7476:6	2
8380	15	3476:12	6356:7	9076:5	9076:5	9076:5	9076:5	2
8381	15	3476:12	9076:5	11476:4	11476:4	9076:5	9076:5	2
8385	15	4092:10	23292:2	23468:2	23468:2	23468:2	23468:2	2

Notes:

1. The 3390 and 839*n* device types are to be used for all disks emulating 3390 devices. Device types 839*n* provide larger block sizes than the default 3390.
2. The 3380 and 838*n* device types continue to be supported for 3380 devices. Device types 838*n* provide larger block sizes than 3380.

8 Database Space Allocation Rules

When processing an add or update record command, the Adabas nucleus may need to allocate an additional extent to any of the following file components:

- address converter
- normal index
- upper index
- Data Storage

This chapter describes the rules used for the allocation.

Address Converter (AC)

The size of the address converter is initially defined by the MAXISN parameter in the ADALOD utility. The actual highest expected ISN is slightly higher because the address converter is stored in entire blocks. For example:

- If RABNSIZE=3, MAXISN=5000 on a model 3380 with 668 entries per block (2004/3) results in 8 blocks. The highest ISN expected (before further expansion) is therefore 5343 (668 * 8 - 1).
- If RABNSIZE=4, MAXISN=5000 on a model 3380 with 501 entries per block (2004/4) results in 10 blocks. The highest ISN expected is therefore 5009 (501 * 10 - 1).

If the Adabas nucleus requires an additional extent for a file when executing N1 commands, the allocation routine attempts to locate a new extent of 25% of the current size:

- If an unused extent between 25% and 28% can be found using the free space table (FST), that space is taken immediately;
- If only longer extents are available in the FST, a new extent of exactly 25% is taken;
- If only smaller extents are available in the FST, the longest available extent is taken;

- If an additional AC extent is required, and the maximum has already been assigned, Adabas will return an appropriate response code to the calling program;
- If a file has the attribute "one AC extent only" (e.g., if the file is an expanded file), an attempt to allocate a second AC extent will cause a response code.

Normal Index (NI), Upper Index (UI), Data Storage (DS)

For the purpose of allocating a new extent, the following formulas are used:

$$Z1 = MIN\left(2 * B,(E-U) * B/U\right)$$

$$Z = MIN\left(MAX(Z1, B/8 + 10),1000000\right)$$

where

B	number of blocks currently allocated.
E	highest ISN expected.
U	highest ISN currently allocated.

If an extent found in the FST is contiguous with the end of a previous extent, it is allocated for a maximum of Z blocks.

If *no* such extent can be found in the FST

- but an extent between Z and 9 * Z/8 is found, it is allocated.
- but an extent with more than 9 * Z/8 blocks is found, then a new extent is allocated with exactly Z blocks.
- the longest extent in the FST is allocated as the new extent.

Additionally, if the MAXNI, MAXUI, or MAXDS parameter is specified for the current file, the nucleus allocates no more than the specified maximum number of blocks for the NI, UI, or DS, respectively.

9 Adabas Response Codes

After each Adabas command is processed, a response code is returned in bytes 11 and 12 of the ACB or in the ACBX. Some response codes also return a subcode in the rightmost two bytes of the ACB's Additions 2 field (offset 45-48) or in the ACBX's Error Subcode (ACBXERRC) field (offset 115-116). This section describes those response codes and subcodes.

Note: Proprietary functions of Adabas may also return response codes and subcodes, some of which are not described here. Refer to the documentation for those functions for more information.

Response code 0 indicates that the Adabas command was processed successfully; any other response code is returned as a result of an error during command processing.

All Adabas commands resulting in a response code other than 0 (ADARSP000), 1 (ADARSP001), and 145 (ADARSP145) restore all Adabas control block fields except the response code field (see the Adabas Command Reference documentation) to the contents the fields held at the beginning of command execution.

For internal errors, contact your Adabas technical support representative.

Response 0	
Origin	Mainframe and open systems
Explanation	The command was executed successfully.

Response 1

Origin Mainframe and open systems

Explanation The meaning of this response code varies, depending on whether you are using Adabas on mainframe systems or Adabas on open systems.

Mainframe Systems

Depending on the subcode in the rightmost two bytes of the ACB's Additions 2 field or the ACBX's Error Subcode (ACBXERRC) field, one of the following has occurred:

Subcode	Meaning
1	An online SAVE operation cannot be executed without the nucleus' PLOG.
2	The selected record is not allowed.
3	S2 command did not have enough space.
4	S2/S9 internal program error.
5	System was not in save status at the end of an online ADASAV.

Note: When one of the subcodes 2-4 is present, the cause could be an S*x* command using security-by-value that found at least one ISN.

Open Systems

An ISN list could not be sorted as a result of an excessive number of resulting ISNs, or because during a non-descriptor search a value larger than the corresponding field length in the FDT was found, or because the ISN quantity returned does not correspond with the actual number of records found.

For an S9 command, this response indicates that there is no space available for additional temporary working space. For an S2 command, this response is only a warning and the S2 becomes an S1.

Action The method of resolving the error varies, depending on whether you are using Adabas on mainframe systems or Adabas on open systems.

Mainframe Systems

Increase the ADARUN LS parameter value.

Open Systems

Provide sufficient disk space for temporary working space or adapt the FDT to the real field length.

Response 2

Origin Mainframe and open systems

Explanation The meaning of this response code varies, depending on whether you are using Adabas on mainframe systems or Adabas on open systems.

Mainframe Systems

This response code can only occur with a BT, ET or RI command. The BT, ET or RI command executes successfully. One of the following has occurred, depending on the subcode:

Subcode	Meaning
1	Adabas attempted to hold an ISN already being held by another user.
2	The number of ISNs as specified in the ISN buffer was too large compared to the ISN buffer length (ET or BT command with the M option).
4	ISN is not on hold during multifetch ET/BT. ET/BT has successfully executed the ISNs so far released. The remaining ISNs are still on hold.
5	An RI command with ISN=0 could not release from hold status all records held by the user, as requested, because one or more records had been updated earlier in the same transaction. Updated records cannot be released from hold status prior to transaction end. All records that had not been updated have been released from hold status.

Open Systems

The required function has not been executed completely. For an OP command with command option 2 = E or for an RE command, the specified record buffer length was shorter than the length of the ET data read. The record buffer has been truncated.

For an A1//N1/N2 command, a descriptor value with the TR option is larger than 1144 bytes. In this case, only the first 1144 bytes are stored in the index. Search operations for truncated values may be inexact since only the first 1144 bytes are evaluated. The first 2 bytes of the Additions 2 field contain the number of descriptor values truncated, the third and fourth bytes contain the field name of the descriptor value that is truncated.

For an S1/S2/S4/S9 command, the resulting ISN list may not represent the exact result: this is because the search values and the values in the database were truncated after 1144 bytes during the search operation of an S1/S2/S4 command and during the sort operation of an S2/S9 command.

Subcode 5 is set if a RI command with ISN=0 could not release from hold status all records held by the user, as requested, because one or more records had been updated earlier in the same transaction. Updated records cannot be released from hold status prior to transaction end. All records that had not been updated have been released from hold status.

Action The method of resolving the error varies, depending on whether you are using Adabas on mainframe systems or Adabas on open systems.

Open Systems

For an OP or RE command, increase the record buffer length or ignore the warning.

For an S1/S2/S4/S9 command, either perform a post-selection using the complete field values, perform your own sort operation using the complete field values, or ignore the warning.

Response 3

Origin Mainframe and open systems

Explanation One of the following has occurred:

- An end-of-file or end-of-list condition was detected.
- A program tried to read or change a multiclient file's record using either a blank or incorrect-length owner ID, or an owner ID that is not allowed for the record.

The following are some possible subcodes:

Subcode	Meaning
1	An end-of-file or end-of-list condition was detected (L3/L6 on a non-expanded file).
4	End of LOB value reached. An attempt was made to read a LOB value segment that begins after the end of the value. This response code/subcode is given to an L1/L4 command with Command Option 2 set to L if the ISN Lower Limit value is greater than or equal to the length of the LOB value being read.
66	A program tried to read or change a multiclient file's record using either a blank or incorrect-length owner ID, or an owner ID that is not allowed for the record.
249	Adabas Vista has determined that no data is available to satisfy this command due to one of the following reasons: ■ A partitioned file end-of-file or end-of-list condition was detected. ■ None of the partitions were available/online and all of them have the file parameter `Critical` set to NO. *Action:* No action is required.

Response 4

Origin Mainframe systems

Explanation The internal Adabas TRS storage directory is full.

Action Free some of the active queries.

Response 7

Origin Mainframe systems only

Explanation A complex search command was rejected because it was estimated that it would exceed the maximum search time TLSCMD.

Response 8

Origin Mainframe systems only

Explanation The current user's command was interrupted to prevent a Work overflow because of a pending backout operation.

Action The value specified for the LP parameter might have to be increased.

Response 9

Origin Mainframe and open systems

Explanation The meaning of this response code varies, depending on whether you are using Adabas on mainframe systems or Adabas on open systems.

Mainframe Systems

A subcode indicating the specific cause and action for this response code appears in the low-order (rightmost) two bytes of the ACB's Additions 2 field or in the ACBX's Error Subcode (ACBXERRC) field. The following are the subcodes and their meanings:

Subcode	Meaning
1	The user was backed out because the hold queue was full. *Action:* Set the number of hold queue elements (ADARUN NH parameter) higher, or tune the application to issue more frequent ET commands.
2	The transaction time limit (TT) has been exceeded, and the transaction was backed out. *Action:* Correct the cause of the timeout, then restart the transaction.
3	The transaction was backed out and one of the following occured: ■ The transaction non-activity time limit (TNAE, TNAX, or TNAA) has been exceeded. ■ The user was stopped by the STOPF or STOPI operator, or an Adabas Online System command.

Subcode	Meaning
	■ A security violation response code has been returned for an ET-logic user. Information about response codes for security violations is provided in the Adabas Security documentation. ■ When a new user issues an OP cmd with the same user ID (in ADD1) as an earlier user did and the earlier user was inactive for more than 60 seconds, the new user can, by issuing a second OP cmd again (the first OP cmd will get response code 9, subcode 64), take over the user ID of the earlier user. When the earlier user becomes active again, this subcode can be received. ■ A potential dead lock situation was detected and in that moment was signaled as response code 145 subcode 9. The following Adabas call then gets response code 9 subcode 3. *Action:* Correct the cause of the timeout, then restart the transaction.
15	The user was backed out because a pending Work area overflow occurred during the user's transaction. Adabas decides to back out a transaction when its start on Work is approximately 1/4th of ADARUN parameter LP away from the current position on Work. *Action:* Either reduce the transaction length (number of updates) or duration (time between transaction start and end) to lessen the data protection area requirement, or increase the data protection area on Work (ADARUN parameter LP).
17	At the end of an online recovery process that was initiated after the failure of a peer nucleus in an Adabas cluster, the nucleus was unable to reacquire the ETID specified by the user in the Additions 1 field of the OP command. *Action:* (In the application program:) Redo the OP command with the ETID specified in the Additions 1 field to reacquire the user ID. Contact your Software AG technical support representative.
18	The user's active transaction was interrupted and backed out because a peer nucleus in an Adabas cluster terminated abnormally. *Action:* (In the application program:) Rerun the transaction.
19	The user's active command was interrupted and stopped because a peer nucleus in an Adabas cluster terminated abnormally. If the interrupted command was using a command ID (CID), the command ID is deleted. *Action:* (In the application program:) Clean up and reacquire the current context pertaining to Adabas command IDs; rerun the transaction.
20	The Adabas cluster nucleus assigned to the user terminated while the user had an open transaction. The transaction has been or will be backed out. *Action:* (In the application program:) If the user was defined with a user ID (ETID) in the Additions 1 field of the OP command, redo the OP command

Subcode	Meaning
	to reacquire the ETID; clean up and reacquire the current context pertaining to Adabas command IDs; rerun the transaction.
21	The user's active command was waiting for an ISN in hold status when the user was backed out and closed due to a timeout or a STOP command.
22	The user's active command was waiting for free space in the work pool when the user was backed out and closed due to a timeout or a STOP command.
23	The user's command was routed to a different cluster nucleus than the one used by previous commands. The user's open transaction has been backed out. It is also possible that the user had already been timed out earlier. *Action:* Restart the transaction and any open read sequences.
24	The user's command was routed to a different cluster nucleus than the one used by previous commands. The user had owned EXU or EXF control over one or more files or had started the Adabas session with an OP command with R-option. As a consequence of creating a new session for the user with the new nucleus, the EXU/EXF control or file list specified in the OP command are no longer in effect. *Action:* Restart the Adabas session with a new OP command.
25	The user's command was routed to a different cluster nucleus than the one used by previous commands. The user had started the Adabas session with an OP command with ETID. As a consequence of creating a new session for the user with the new nucleus, the user is no longer associated with that ETID. *Action:* Restart the Adabas session with a new OP command.
26	The user's command was routed to a different cluster nucleus than the one used by previous commands. Some cluster nucleus terminated abnormally while the new nucleus was creating a new session for the user. *Action:* Restart the Adabas session with a new OP command.
62	An OP (open) command was issued without a user/ET ID, which is required for this type of application or environment. *Action:* Correct the program to specify a user/ET ID, and rerun the program.
63	An OP command was given for an ET user not in ET status. The user is backed out with an Adabas-generated BT command, and the operation is closed. *Action:* Repeat the OP call.
64	An OP command was issued with an 8-byte ET ID that already exists.

Subcode	Meaning
66	An Adabas session with OPENRQ=YES was active and the user issued an Adabas command without having issued an OP command. *Action:* Ensure that all users issue an OP command as the first Adabas command.
67	Insufficient Work part 1 space for open command with ETID definition when trying to read the user profile.
68	The user queue element has been deleted. Most likely the command was thrown back due to ISN contention or space shortage. The space shortage is normally workpool space; if this is the case, the LWP parameter setting should be increased.
73	This subcode is issued by Adabas Transaction Manager. The client session had an externally-controlled transaction, the outcome of which was “in doubt”. ATM forcibly resolved the “in doubt” transaction. There is a possibility that ATM’s resolution of the transaction might be inconsistent with the intended outcome. Check that the outcome of the session’s Adabas changes, in its previous transaction, was consistent with its changes to non-Adabas resources. Check the external transaction coordinator for reasons why the original transaction might have been left in the “in doubt” state. If the external coordinator indicates that the transaction was completed, and if the relevant system logs give no indication of the cause of the problem, contact your Software AG support representative.
74	This subcode is issued by Adabas Transaction Manager. The client’s database session has lost its ETID. If a transaction was in progress, ATM attempted to back it out from all affected databases and release all held records. Issue a new `OP` command to the database.
75	This subcode is issued by Adabas Transaction Manager. Either a commit operation involving an external transaction coordinator failed, or resynchronization with an external transaction coordinator caused the transaction to be backed out. In the first case, ATM attempted to back out the transaction. For the first case, check the external transaction coordinator for the reason. Check for error messages from ATM transaction managers or the ATM client proxy of the failing job.
76	This subcode is issued by Adabas Transaction Manager. An error occurred while an ATM transaction manager was attempting to rebuild the transaction hierarchy of a client session that has migrated from

Subcode	Meaning
	another ATM transaction manager's domain as a result of dynamic transaction routing. ATM attempted to back out the transaction. Check the status of the transaction using Online Services. Check for error messages from ATM transaction manager or the ATM client proxy of the failing user.
77	This subcode is issued by Adabas Transaction Manager. This message indicates that the client session had an open transaction and has been migrated from one node to another within a cluster (Sysplex), but ATM could not handle the transaction safely because no Migrated Transaction Record (MTR) file had been defined. The transaction was therefore backed out. Define and create an MTR file, and restart the ATM transaction managers and clustered application environments in the COR group.
78	This subcode is issued by Adabas Transaction Manager. It was not possible to commit the client session's transaction because of a pending `ET` syncpoint on a target database. This could be because of a concurrent online save operation, database termination, or a `SYNCC` operator command. Backout of the incomplete transaction was attempted. Restart the transaction when the pending `ET` syncpoint has been completed.
79	Used by Adabas System Coordinator to signal the (optional) terminal timeout. Refer to the description of Generate RSP009/79 in the Adabas System Coordinator Parameters documentation for more information.
80	This subcode is issued by Adabas Transaction Manager. The client session was not at `ET` status in the target database. Backout of the incomplete transaction was attempted. Restart the transaction.
81	This subcode is issued by Adabas Transaction Manager. A memory shortage in the ATM transaction manager's address space caused the current global transaction to be backed out. Increase the amount of memory available to the ATM transaction manager, restart it, then restart the transaction.
82	This subcode is issued by Adabas Transaction Manager. A memory shortage occurred in the ATM transaction manager's address space, and ATM attempted to back out the current global transaction. Increase the amount of memory available to the ATM transaction manager, restart it, then restart the transaction.

Subcode	Meaning
83	This subcode is issued by Adabas Transaction Manager. An error occurred during a commit or backout operation for a global transaction. ATM attempted to back the transaction out. If the cause of the error is not apparent from console messages, contact your Software AG technical support representative.
84	This subcode is issued by Adabas Transaction Manager. ATM reported conflicting use of an ETID. For an `RE` command, this subcode can be returned if the client is known to ATM but has no ETID. The client should issue a `CL` command to each open database; then re-open.
85	This subcode is issued by Adabas Transaction Manager. The global transaction time limit (`TMGTT`) has been exceeded, and an attempt has been made to back out the global transaction. Correct the cause of the timeout, then restart the transaction.
86	This subcode is issued by Adabas Transaction Manager. The global transaction time limit (`TMGTT`) has been exceeded, and the global transaction has been backed out. Correct the cause of the timeout, then restart the transaction.
90	This subcode is issued by Adabas Transaction Manager. The ATM client proxy detected either an inconsistency between its view of the client session's status and the ATM transaction manager's view, or that the transaction manager had restarted. It attempted to back out on all target databases. Close the client's sessions and start them again.
91	This subcode is issued by Adabas Transaction Manager. Transactions on a target database were being quiesced, or an administrator issued a "stop" request for the session's transaction via ATM Online Services or operator command, or there was a pending `ET` syncpoint on the database. Backout of the incomplete transaction was attempted. Restart the transaction when all required target databases are available.
92	This subcode is issued by Adabas Transaction Manager. Transactions on a target database were being quiesced, or an administrator issued a stop request for the user via ATM Online Services or operator command, or there was a pending `ET` syncpoint on the database. The incomplete transaction was backed out. Restart the transaction when all required target databases are available.

Subcode	Meaning
93	This subcode is issued by Adabas Transaction Manager. An error occurred while ATM was attempting either to start a new global transaction or to bring a new database into a transaction. The client proxy backed out changes from all databases. The next command issued returns details of the error that caused the backout. Check the meaning of the response code and act accordingly.
94	This subcode is issued by Adabas Transaction Manager. An error occurred while ATM was attempting either to start a new global transaction or to bring a new database into a transaction. The client proxy attempted to back out changes from all databases. The next command issued returns details of the error that caused the backout. Check the meaning of the response code and act accordingly.
95	This subcode is issued by Adabas Transaction Manager. The client session's transaction was controlled by an external transaction coordinator, which reported that the transaction has been backed out. Restart the transaction.
96	This subcode is issued by Adabas Transaction Manager. The client session's transaction was controlled by an external transaction coordinator, which reported "backed out, outcome pending" for the transaction. This means that backout has begun for the transaction, and will be completed when all the resource managers involved in it are able to comply with the backout request. Restart the transaction.
97	This subcode is issued by Adabas Transaction Manager. The CICS Resource Manager Interface is in use, and the ATM client proxy detected that the client session's Task Interface Element (TIE) was being used by another session. This can occur if all of the following are true: ■ Natural is being used, in such a way that two Adabas sessions are maintained for each client; ■ The client control `Transaction Model` is set to MESSAGE; ■ Natural parameters are set such that Natural might not generate `OP` commands for all database sessions. You can make sure that Natural generates `OP` commands by using a non-blank ETID, or by means of Natural's `DBOPEN` parameter.

Subcode	Meaning
	The condition can also occur if all of the following are true: ■ Natural is being used, in such a way that two Adabas sessions are maintained for each client; ■ The Adabas System Coordinator has timed out Natural's "system" session. In this case, a new Natural LOGON might clear the condition. Otherwise terminate the session and start a new session. If the error persists, contact your Software AG support representative.
98	This subcode is issued by Adabas Transaction Manager. The client session was executing in serial mode, and requested that changes be committed. Some of the changes were committed, and some were backed out. Examine the results of the transaction. If necessary, correct the result by manual intervention.
99	This subcode is issued by Adabas Transaction Manager. The client session incurred a security response code; ATM backed out the user's changes. If security permissions are not adequate, correct them and rerun the transaction.
249	In Adabas Vista, all transaction activity by the client has been backed out for one of the following reasons: ■ The client is using multiple (different) ETIDs which have collided against a particular database. *Action:* Review the client's use of ETIDs with respect to the current translation rules and/or partitioned files.

Open Systems

This response is caused by one of the following:

- The last user transaction has been backed out by Adabas (ET logic users only) or an exclusive control user (non-ET user) or an access-only user exceeded the Non-Activity Time Limit;
- The user session was abnormally terminated by the operator and the user issued a command;
- The protection log area (= WORK container) was too small and an internal BT was executed.

The ADDITIONS 2 field in the control block contains additional information:

First two bytes	Third and fourth bytes	Explanation
0	TT	Transaction timeout
1	TN	Non-activity timeout
2	ST	STOP user
3	LP	WORK overflow
5	SE	Security
6	DL	Deadlock
8	OP	Open transaction
9	OR	Open required
10	RR	Replication recording failed One of the internal Adabas commands issued for replication recording got an unexpected response code, for example 77. This response code is included in the control block in the field ACBXSUBR (only if you use the ACBX interface) and displayed in an RPLIRSP message in the nucleus log.

```
                                    First      Third+
                                     two       fourth
                                    bytes      bytes
                                   -------    -------
          Transaction timeout :      0          TT
          Non-activity timeout:      1          TN
          STOP user           :      2          ST
          WORK overflow       :      3          LP
          Security            :      5          SE
          Deadlock            :      6          DL
          Open transaction    :      8          OP
          Open required       :      9          OR
```

The information in the first two bytes is represented as an integer, and the third and fourth bytes are alphanumeric.

Action

The method of resolving the error varies, depending on whether you are using Adabas on mainframe systems or Adabas on open systems.

Mainframe Systems

User actions are described in the subcode list in the explanation.

Open Systems

Check the appropriate reason. If the Adabas nucleus was started without the option OPEN_REQUIRED, and the reason for response 9 was a non-activity timeout or a

STOP user, users who started their sessions with an OP command must re-issue their OP command under the following circumstances:

- if they set a User ID
- if they specified restricted file lists
- if they had user-specific timeout values
- if they were not ET users.

If too many transactions are backed out because of a Work overflow, the size of the Work container should be increased.

Response 10

Origin Mainframe systems only

Explanation Too many occurrences for a periodic group.

Response 16

Origin Open systems only

Explanation An error occurred in an MC call during subcommand processing. The error code and additional information can be found in the control block of the subcommand. The first 2 bytes of the Additions 2 field contain the number of the subcommand in binary format. The third and fourth bytes of the Additions 2 field contain the offset of the subcommand's control block in the MC call's record buffer in binary format. All subcommands before the one that failed were executed.

Action Correct the failed subcommand if necessary and re-issue the subcommands beginning with the one that had failed.

Response 17

Origin Mainframe and open systems

Explanation A subcode indicating the specific cause and action for this response code appears in the low-order (rightmost) two bytes of the ACB's Additions 2 field or in the ACBX's Error Subcode (ACBXERRC) field. The following are the subcodes and their meanings:

Subcode	Meaning
1	The program tried to access system file 1 or 2, and no OP command was issued. *Action:* Restructure the program to begin with an OP command.
2	The program tried to access system file 1 or 2, and the user is not authorized. *Action:* Change the program to avoid the access.

Subcode	Meaning
4	One of the following occurred: ■ The specified file number is invalid. The file number might be equal to "0" or greater than the maximum allowed. ■ When running with ADARUN DTP=RM or DTP=TM, an attempt was made by a non-Adabas Transaction Manager user to access/update an Adabas Transaction Manager system file.
5	The file is either not loaded, or has been locked by another user for privileged use. On mainframe systems, for ADAORD and ADAINV utility operations, the write phase has started and use of the file is now blocked for the type of operation you requested.
6	On mainframe systems, an E1 (delete record) command was given without specifying a valid file number. On open systems, the file to be created already exists.
7	The program tried to perform an LF command on system file 1 or 2.
8	On mainframe systems, the program tried to access a file that was not listed in the file list of an open (OP) executed with the R option. On open systems, an ET user with a restricted file list and ACC = file number attempted to issue a UPD command, or a user with a restricted file list attempted to touch a file that is not in the file list
9	The file that the program attempted to access is completely locked. This may occur because of a LOCKU operation or because the maximum number of logical file extents that can fit into the FCB has been reached. *Action:* If the file was locked using a LOCKU operation and keeping the lock in place is no longer warranted, use the UNLOCKU operation to free the lock. If the file is locked because the maximum number of file extents has been reached, use ADAORD to reorder the file into fewer extents, then use UNLOCKU to free the lock. Note that in the latter case, if you DELETE or REFRESH the file, Adabas also frees the lock.
10	The program attempted to access a file which is locked with exclusive EXU status.
11	An LF command (read FDT) was run on a file that is not loaded; neither the FCB nor the FDT exists.
12	File has been locked with LOCKF.
13	A file is password-protected and the password was specified, but the corresponding security file is missing (not loaded).
14	A command was issued against a LOB file. Commands involving LB fields should be directed against the associated base file, not the LOB file.
15	A file is being loaded so its information is temporarily unavailable.

Subcode	Meaning
16	On mainframe systems, an attempt was made to perform an update (e.g. A1, E1, N1/2) against a file loaded with the attribute RPLUPDATEONLY=YES or READONLY=YES. On open systems, the file was locked by ADAOPR.
17	An attempt was made to perform an update (e.g. A1, E1, N1/2) against a file loaded with the attribute READONLY=YES.
18	File has been locked with ALOCKF.
21	On mainframe systems, there was not enough space for encoding elements (ECSE). On open systems, a two-byte file number was used against a lower version database that does not support large file numbers.
22	On mainframe systems, the required ECS objects needed for conversion between user and system data representation could not be loaded. On open systems, the file control block (FCB) is invalid (corrupted).
23	ECS object could not be located. The following objects must be available in the encoding objects library: File Alpha, File Wide EDD, User Alpha, User Wide EDD, and the PTOs for the combinations between file/user alpha/wide encodings. *Action:* Check that the required EDD and PTO objects are available.
24	ECS function get_attribute() failed. *Action:* The function's return code is logged with the nucleus message ADAN7A.
25	One of the following occurred: - A required encoding attribute was missing in an ECS object (encoding type, class, and flags) - The default space character length was > 4 - Default space table allocation failed - If DBCS-only plane exists, wide space character was undefined, or the length > 4, or wide space table allocation failed
29	An Adabas Review communication error has occurred. Contact your Software AG support representative.
52	A non-Adabas target was called.
99	The file's FTD is corrupted. *Action:* To resolve the problem, repair the file by running a restore/regenerate from a consistent state.
249 (0x00F9)	While attempting to satisfy a partitioned file command, Adabas Vista detected the unavailability of an FDT – this is invalid for one of the following reasons: ■ None of the partitions were available/online and at least one of them has the file parameter `Critical` set to YES.

Subcode	Meaning
	■ None of the partitions were available/online and all of them have the file parameter `Critical` set to NO and the command can not be satisfied with a "no data" response such as RSP003. An error occurred when Adabas Vista (open systems) tried to access a file that was not listed in the file list of an `OP` command executed with the R option. *Action:* Ensure at least one of the file partitions is available/online or review the program logic.

Response 18

Origin Mainframe and open systems.

Explanation Invalid file number usage. The file number was modified between successive L2/L5 calls or between successive L*x* and S*x* calls.

Action Correct the file number.

Response 19

Origin Mainframe and open systems.

Explanation An attempt was made to update a file which is either already open for read access or can only be opened for read access. The leftmost two bytes of ACB's Additions 2 field or the ACBX's File Number (ACBXFNR) field may contain the file number.

Action Do not attempt to update a file with read-only access.

Response 20

Origin Mainframe and open systems.

Explanation One of the following invalid values was used for a command ID value:

- Binary zeros
- Blanks
- The high-order byte contains the hexadecimal value "FF", but there is no automatic command ID generation
- The three high-order bytes contain the ASCII string "SYN".

Action Correct the command ID and avoid using any of these invalid command ID values.

Response 21

Origin Mainframe and open systems

Explanation An invalid command ID value was detected. One of the following explanations or subcodes is provided:

Subcode	Meaning
1	The command ID value was not found in the sequential command table. This is not an initial call and there was no previous initial call, or the command ID was deleted or lost in a timeout or recovery action.
3	The command ID value specified for the L3/L6 command was assigned to another Lx command.
5	The command ID value specified for the L9 command was assigned to another Lx command.
6	Unexpected last file in chain.
7	The command ID value specified was assigned to a different file.
8	The command ID value specified for the Sx command is for a sorted ISN list; the ISN list was not in ISN sequence.
9	An application running with PREFETCH=YES or PREFETCH=OLD attempted to dynamically reverse the read direction of an L3/L6/L9 command. This is not allowed.
10	The master file number is not the same as it was in the initial call for this command ID.
12	ACB(X)Add1 altered after initial call.
13	S9 ISN list already sorted
14	Not a chained file as expected.
15	Not an L2 sequence as expected.
16	Chained file transformed ISNs not permitted.
17	CID does not exist for chained file.
18	File was not master file as expected.
19	Special L3 started on a valid file number and subsequent L3 issued with the API option.
20	Chained file ISNs not transformed.
21	Special L3 system area not as expected. System area changed.
22	The command ID value specified was assigned to a different file and FBL is not equal to zero.
23	Incorrect CID for sort function.
249 (0x00F9)	An invalid command ID value was detected by Adabas Vista (open systems): ■ The command ID value specified with the N option of an `L1/L4` command was not found.

Subcode	Meaning
	■ The command ID value specified with the N option of an L1/L4 command does not correspond to an ISN list. ■ One or both of the ISN lists referred to in the ADDITIONS 1 field of an S8 command do not exist. *Action:* Review the program logic.

Action Correct the command ID.

Response 22

Origin Mainframe and open systems

Explanation The command or command option is invalid. A subcode indicating the specific cause and action for this response code appears in the low-order (rightmost) two bytes of the ACB's Additions 2 field or in the ACBX's Error Subcode (ACBXERRC) field.

When using the LNCSTUB module on mainframe systems, this response code may indicate problems with the initial call (IC) to the Adabas CICS command-level link component. If the Adabas control block shows a command code of "IC", the link routine being used may not be at the proper release level or may not be the command-level version.

The following are the subcodes and their meanings:

Subcode	Meaning
1	One of the following occurred: ■ The nucleus detected an invalid command code. ■ A command was issued after a CL command in single-user mode.
2	This command cannot be issued by an ACC (access only) user; and update command cannot be issued by an access-only user.
3	This command cannot be performed on a read-only nucleus; an update command cannot be issued for a read-only database session.
4	This privileged command was issued without a previous OP (open) command.
5	The command is not valid for a nonprivileged user.
6	The command was rejected by user exit 11.
7	Incorrect command options were specified for a privileged command.
8	The command is invalid for an ET user in preliminary ET status. First complete the transaction using Adabas Transaction Manager.
9	The current user is not authorized to issue an ET/BT command.
10	The C2 command is no longer permitted.

Subcode	Meaning
11	The C3 command can only be issued by EXU users.
12	The L1/4 command with the option "F" is not valid for expanded files.
13	The call issued is not permitted when the database is in a suspend state.
14	Invalid privileged command.
15	An L1/L4 command specified the multifetch option ("M" or "O") was not combined with either the "I" or "N" option.
16	The user does not have "privileged" command authorization.
17	A refresh file (E1 command with ISN zero) is not permitted during online save database or file.
18	Applications using the ADALNK X'48' call logic receive this response when the logic has been suppressed.
19	On mainframe systems, a special utility command was issued for an obsolete subfunction. On open systems, an ET or BT with command option "S" was issued without subtransactions being enabled for the current Adabas user session by specifying command option "S" in the OP command.
21	One of the following occurred: ■ A BT command was issued by a non-ET logic user. ■ An ET command was issued for a distributed transaction managed by Adabas Transaction Manager; ET commands are invalid for a distributed transaction managed by Adabas Transaction Manager.
22	The current transaction has already been heuristically terminated or the command is not allowed within an MC sequence.
23	One of the following occurred: ■ The last MC subcommand is not ET. ■ A BT command was issued for a distributed transaction managed by Adabas Transaction Manager; BT commands are invalid for a distributed transaction managed by Adabas Transaction Manager.
24	One of the following occurred: ■ An ET or CL command with user data is not allowed for read-only access to a database. ■ CL is invalid because the user has a transaction in progress that is managed by Adabas Transaction Manager.
25	A command was sent from an Event Replicator Server to an Adabas nucleus, but the Adabas nucleus is not running with ADARUN REPLICATION=YES.

Subcode	Meaning
26	An attempt was made by an Adabas nucleus to connect to an Event Replicator Server when the target of the message is actually another Adabas nucleus, not an Event Replicator Server.
27	During initialization, the Auditing Server performed a handshake with a source nucleus and detected that the nucleus is running with AUDITING=NO. *Action:* Make sure that the source nucleus is running with AUDITING=YES.
28	One of the following occurred: ■ A replicated utility may not be executed for a replicated file when the Adabas nucleus is running in single-user mode. ■ During initialization, the ADAARP utility performed a handshake with an Auditing Server and detected that the structure level of the auditing software was different. *Action:* Make sure the structure level of the auditing software in the ADAARP utility and the Auditing Server is the same. This is usually achieved by using the same version/release/SM level of the software.
29	One of the following occurred: ■ An error occurred during a connection attempt by an Event Replicator Server database. Ensure that you are trying to connect to another Adabas nucleus and not an Event Replicator Server and try again. ■ During initialization, the ADAARP utility performed a handshake with an Auditing Server and detected that the Adabas structure level was different. *Action:* Make sure the structure level of the Adabas software in the ADAARP utility and the Auditing Server is the same. This is usually achieved by using the same version/release/SM level of the software.
30	During initialization, Auditing Server performed a handshake with a source nucleus and detected that the nucleus is running with AUDITING=YES, but does not send auditing data. *Action:* Make sure that the source nucleus sends auditing data to the server.
31	API file delete not permitted: not API loaded.
32	An attempt was made to update a replicated file in single-user-mode. Replicated files can be updated only in multi-mode; replication is not supported in single-mode. However, a nucleus with replication support can be started in single-mode for maintenance purposes.
33	A shared hold status request (with command option 3 set to "C", "Q", or "S") is not allowed for a command with prefetch (command option 1 set to "P"). On open systems, the command option "S" is not allowed for an S9 command with a non-blank Additions 4 field.

Subcode	Meaning
34	On open systems, the command was rejected by user exit 11.
35	The command cannot be executed with the nucleus parameter NT=1.
36	The descending option "D" is not allowed for the command.
37	On mainframe systems, a shared hold status request (command option 3 is set to "C", "Q", or "S") is not allowed for a non-ET user. On open systems, a shared hold status request (command option 3 is set to 'C', 'Q', or 'S') is not allowed for a non-ET user.
38	A shared hold status request for a sequential read command (command option 3 is set to "Q") is not allowed for an L4 command without the N-option, nor is it allowed for an S4 command without a command ID (CID) or with an ISN buffer length other than 4 bytes.
39	A shared hold status request for a sequential read command (command option 3 is set to "Q") is not allowed for a command with a multifetch (command option 1 is set to "M" or "O"). Also, a shared hold status request (with command option 3 set to "C", "Q", or "S") is not allowed for a read command with prefetch (command option 1 is set to "P").
40	A keep-in-shared-hold-status request (with command option 3 set to "H") is not allowed for an ET or BT command with multifetch or prefetch (command option 1 is set to "M" or "P").
41	A request to read the next portion of a LOB value (command option 2 is set to "L") is not allowed for an L1/L4 command with multifetch (command option 1 is set to "M" or "O") or prefetch (command option 1 is set to "P").
42	On open systems, for an A1 command with command option 2 = 'T', the current time is still the same as the value of the field with SY=TIME in the database.
48	An obsolete internal request to shut down Adabas, supposedly coming from Entire Net-Work, has been issued and rejected.
50	The Router (LCC) detected an invalid command code. This may also arise when a new ACBX-type call is presented to a back-level router.
51	A client call with the ADARUN parameter PREFETCH=OLD has multiple APLX buffers or the contents of APLX+4(chained APLX) is non-zero. To resolve this,. use the ADARUN parameter setting PREFETCH=YES.
52	A non-Adabas target was called.
53	Invalid file specified for an Adabas Online System function.
54	The user was stopped with STOPUR or STOPSUR.
55	The command is returned because the command queue timeout time specified by the DELCQ operator command or the AUTOCQTIME ADARUN parameter was reached or exceeded for the command.
57	During initialization, an Auditing Server performed a handshake with a source nucleus and detected that its structure level of the auditing software was different.

Subcode	Meaning
	Action: Make sure the structure level of the auditing software in Adabas nucleus and Auditing Server is the same. This is usually achieved by using the same version/release/SM level of the software.
58	During initialization, a source nucleus performed a handshake with an Auditing Server and detected that the structure level of the auditing software was different. *Action:* Make sure the structure level of the auditing software in Adabas nucleus and Auditing Server is the same. This is usually achieved by using the same version/release/SM level of the software.
1005	The command code is invalid.
1006	The ACBX is invalid (not first buffer).
1007	The ABD is invalid.
1008	The ABD type is invalid.
1009	More than one search buffer specified.
1010	More than one value buffer specified.
1011	More than one ISN buffer specified.
1012	The number of search and value buffers do not match.
1013	The number of format and record buffers do not match.
1015	A streaming logic error occurred.

Action Correct the command code or command option or the previous OP command, and rerun the program.

Response 23

Origin Mainframe and open systems

Explanation An invalid starting ISN was specified for an L2/L5 command sequence:

- The ISN was not assigned to a record in the file; or
- The ISN was greater than the MAXISN in effect for the file.

Open Systems

On open systems the following subcodes may occur:

Subcode	Meaning
249 (0x00F9)	An invalid ISN was detected by Adabas Vista (open systems). The starting ISN specified for an L2/L5 command sequence is not consistent with the definitions for the partitioned file. *Action:* Review the program logic.

Action Correct the ISN.

Response 24

Origin Mainframe and open systems

Explanation The meaning of this response code varies, depending on whether you are using Adabas on mainframe systems or Adabas on open systems.

Mainframe Systems

For an S9 command:

- The ISN list in the ISN buffer was already sorted; or
- The ISN list in the ISN buffer contained an invalid ISN; or
- The "D" option was specified when trying to sort an ISN list by ISN.

Open Systems

An ISN is equal to "0" or is greater than or equal to the first free ISN found in the ISN buffer. The Additions 2 field contains the value of the invalid ISN in 4 byte binary format.

Action Correct the ISN buffer.

Response 25

Origin Mainframe and open systems

Explanation The ISN specified in ISN lower limit field for an S1/S4 or S2/S9 command was not found.

Open Systems

On open systems the following subcodes may occur:

Subcode	Meaning
249 (0x00F9)	An invalid ISN was detected by Adabas Vista (open systems). The ISN specified in the ISN Lower Limit field for an S2 command when retrieving a group of ISNs from a saved ISN list was not found. *Action:* Review the program logic.

Action Correct the ISN lower limit.

Response 26

Origin Mainframe and open systems

Explanation An invalid ISN buffer length for an S9 command was detected. The number of ISNs to be sorted as provided in ISN quantity is equal to "0".

Depending on the subcode in the rightmost two bytes of the ACB's Additions 2 field or the ACBX's Error Subcode (ACBXERRC) field, one of the following has occurred:

Subcode	Meaning
2	An S9 command with an ISN buffer contains ISNs that are higher than the TOP-ISN of the file.

Action Correct the ISN buffer length.

Response 27

Origin Mainframe systems only

Explanation Sufficient work space was not available to accommodate the combined sizes of the search and value buffers as indicated in the search buffer length and value buffer length fields.

Subcode	Meaning
1	Sufficient work space was not available to generate the format translation.

Response 28

Origin Mainframe and open systems

Explanation The first two bytes of the Additions 1 field contained an invalid descriptor for an L3/L6 or S2/S9 command.

Depending on the subcode in the rightmost two bytes of the ACB's Additions 2 field or the ACBX's Error Subcode (ACBXERRC) field, one of the following has occurred:

Subcode	Meaning
1	The field was not a descriptor.
2	The use of the descriptor is not supported (for example, phonetic descriptors or the descriptor is contained within a periodic group).
3	The descriptor was changed between successive calls.
4	There is a mismatch of the descriptor names in the Additions 1 field and the search buffer.
5	An initial L3 or L6 call contains no trailing blanks in the Additions 1 field.
7	ADAINV is inverting the file and using the descriptor.
8	The descriptor is missing in the file index.
9	An internal error occurred during SB interpretation.

Action Correct the Additions 1 field.

Response 29

Origin Mainframe and open systems

Explanation In an L3 or L6 command, a value repositioning was attempted (bytes 3-8 of the Additions 1 field contain spaces) and the Command Option 2 field did not contain the value "A", "D", or "V". The command ID is released.

Action Correct the Additions 1 or Command Option 2 field.

Response 34

Origin Mainframe systems only

Explanation An invalid command option has been detected.

Depending on the subcode in the rightmost two bytes of the ACB's Additions 2 field or the ACBX's Error Subcode (ACBXERRC) field, one of the following has occurred:

Subcode	Meaning
1	An invalid command option has been specified in one of the command option fields.
2	The R option has been specified for the C5 command, but replication is not active.
9	A record buffer must be specified for this command but is missing (not specified of length zero).

Action Either remove the invalid command option or replace it with a valid option.

Response 35

Origin Mainframe systems only

Explanation The user/DBA attempted to perform a function for a noncluster Adabas nucleus that is available only for an Adabas cluster database.

Action Either perform the function against a cluster database or change the function.

Response 39

Origin Mainframe systems only

Explanation A logically deleted descriptor was used as a search criterion or was specified in the first two bytes of the Additions 1 field for an L3, L6, L9, S2, or S9 command.

Action Remove the use of the logically deleted descriptor and inform your database administrator about the problem.

Response 40

Origin Mainframe and open systems

Explanation A syntax error was detected in the format buffer.

Mainframe Systems

On mainframe systems, one of the following subcodes may be used:

Subcode	Meaning
1	Syntax error in format buffer; possible premature end of buffer segment.
2	Syntax error in the format buffer -- bad first or second character of field name or missing "/".
3	Text literal has no ending quote or is too long (more than 255 characters).
4	Text literal is empty.
5	Expected delimiter missing.
6	Conditional format criterion has no closing parentheses ")".
7	The conditional format criterion is empty.
8	Invalid field name, format, or search operator.
9	One of the following occurred: ■ An invalid edit mask number (greater than 15) was specified. ■ A syntax error in the conditional format criteron was found. ■ Multiple format buffer segments are specified with conditional format criterion.
10	Invalid character following field name specification.
11	Invalid index specification for MU field in PE group.

Subcode	Meaning
12	Expected number missing or too large (>=2^{31}).
13	Syntax error in LOB segment specification.
14	Syntax error in L element specification.
15	Syntax error in D element specification (daylight savings time indicator).
16	Invalid Date-Time edit mask specification.
17	MU/PE index range specification invalid for LOB segment notation.

On mainframe systems, the following information is returned in the Additions 2 field of the control block:

- The leftmost two bytes contain the two characters being inspected when the error was detected.
- The rightmost two bytes contain the subcode.

Open Systems

One of the following format buffer errors occurred.

- The terminating period was missing;
- The first position contains a period, this only applies to N1 or N2 commands;
- Length and/or format specified with a range definition;
- An invalid element was detected;
- A field segment notation was not correct: it must be specified either as `(byte-number,length)` or as `(byte-number,length,length-2)`, where `byte-number` must be either "*" or a decimal number, and `length` and `length-2` are decimal numbers. These numbers must be less than 2,147,483,648;
- A field segment notation was specified for a range of MU fields or for a range of fields within a periodic group.

On open systems, the following information is returned in the Additions 2 field of the control block:

- The leftmost two bytes contain the number of the byte (in binary format) relative to the beginning of the format buffer where the error was detected.
- The rightmost two bytes contain the name of the field being processed when the error was detected.

Action Correct the format buffer.

Response 41

Origin Mainframe and open systems

Explanation The meaning of this response code varies, depending on whether you are using Adabas on mainframe systems or Adabas on open systems.

Mainframe Systems

One or more specification errors exist in the format buffer. When possible, the short name of the field for which the error occurred is stored at offset 2 of the ACB's Additions 2 field or in the ACBX's Error Character Field (ACBXERRB).

The following specification errors may have been made:

Note: A collation descriptor (COLDE) can only be specified in the format buffer of the L9 command and only when the decode option has been specified in the user exit. The value returned is not the index value but the original field value.

Subcode	Meaning
1	Spacing element *n*X with *n*=0 or *n*>255 not allowed.
2	An invalid sequence of format buffer elements was specified.
3	Miscellaneous types of specification errors were found in the format buffer.
4	A field name was undefined or not elementary.
5	Format without fields.
6	A group field cannot be specified if the group contains a LOB (LB) field.
7	A field name is undefined.
8	Invalid use of *fld*D, *fld*L, *fld*,* or E(*date-time-mask*) notation.
9	Elementary field in PE group: 1-N notation not permitted with LOB (LB) fields or *fld*D notations.
10	A LOB (LB) field, *fld*L (length indicator notation) or *fld*,* (asterisk notation) are not permitted with an L9 command.
11	A length indicator (*fld*L) or asterisk notation (*fld*,*) are only permitted for LA and LOB (LB) fields.
12	LA or LOB (LB) fields are not permitted with 1-N notation, *flda-fldb* (field series) notation or old MU syntax.
13	LA or LOB (LB) fields are not permitted with *fld*C,* (count indicator) or *flda-fldb*,* (field series notation).
14	Asterisk notation and length indicator notation combinations (*fld*L,*) are not permitted.
15	SQL significance indicator and asterisk notation combinations (*fld*S,*) are not permitted.
16	Length indicator (*fld*L), asterisk notation (*fld*,*) or daylight savings time indicator notation (*fld*D) are not permitted for a group field.

Subcode	Meaning
17	Daylight savings time indicator notation (*fld*D) cannot be combined with asterisk notation (*fld*,*) or a length indicator notation (*fld*L).
18	Daylight savings time indicator notation (*fld*D) is only permitted for fields defined with the TZ option.
20	Daylight savings time indicator notation (*fld*D) is not permitted with count indicator (*fld*C) or field series notation (*flda-fldb*).
21	Old MU syntax is not permitted with daylight savings time indicator notation (*fld*D).
22	An invalid length or format has been specified with daylight savings time indicator notation (*fld*D); if specified it must be 2,F.
23	An invalid length or format has been specified with length indicator notation (*fld*L); if specified it must have length 4 and format B.
24	A phonetic, collation, or hyperdescriptor was specified.
25	Date-time edit mask notation (E(*date-time-mask*)) is not permitted with daylight saving time indicator notation (*fld*D), asterisk notation (*fld*,*), or length indicator notation (*fld*L).
26	Date-time edit mask (E(*date-time-mask*)) notation requires format P, U, F, or B.
27	Date-time edit mask (E(*date-time-mask*)) notation and edit mask notation (E0-E15) are not permitted together.
28	Date-time edit mask (E(*date-time-mask*)) notation and count indicator notation(*fld*C) are not permitted together.
30	Date-time edit mask (E(*date-time-mask*)) notation is only permitted for a field defined with a date-time edit mask.
31	Daylight savings time indicator notation (*fld*D), length indicator notation (*fld*L), and asterisk notation (*fld*,*) are not permitted together with LOB segment notation.
32	LOB segment notation is permitted only for LOB (LB) fields.
33	More than one LOB segment with *-position not permitted.
34	Length/format override not permitted for LOB segment notation.
35	Invalid byte number and length parameters in LOB segment notation.
36	Invalid length-2 parameter in LOB segment notation; must be equal to length parameter.
37	Invalid syntax with daylight saving time indicator in format buffer.

Open Systems

An error was detected in the format buffer:

- The field name specified is reserved for edit mask usage;
- An index was equal to 0;

- A length specified or taken from the FDT standard length is greater than the maximum length of the required format;
- *nnn*X was specified with *nnn* greater than 253;
- A literal with more than 253 characters was specified;
- A subdescriptor, superdescriptor, phonetic descriptor, hyperdescriptor or a collation descriptor was specified;
- A field specified was not present in the file;
- A periodic group name appears without an index;
- A length and/or format was used with a group notation;
- A field in a periodic group was specified without an index;
- A range notation with a group name or a multiple-value field as the first or last element was specified;
- A reference was made to the count of a multiple-value field contained in a periodic group, and no index was included to indicate the periodic group occurrence for which the count was to be returned;
- A collation descriptor with the option HE was specified for an L9 command.
- A count specification was made for a field which was neither a multiple-value field nor was contained within a periodic group;
- A count for a non-multiple value field within a periodic group was specified;
- A length and/or format specification was used with a periodic group notation;
- A (regular or periodic) group containing a multiple-value field was specified;
- Invalid index usage;
- A descending index range was specified;
- A double index was used for a non-periodic field;
- A multiple-value field with an index specification and a multiple-value field without an index specification were used;
- A value cannot be converted to the required format (READ command) or converted to the FDT standard format (UPDATE command);
- The S element was applied to a field that does not have the NC option;
- A field with the NC option was used more than once together with its S element;
- The add option is not compatible with the format/length;
- The specification of a character set was invalid;
- A field was specified with an edit mask not allowed for the field;
- A field segment notation '(byte-number,length)' or '(byte-number,length,length-2)' was not correct: byte-number + length must be less than or equal to the maximum value length + 1, and length-2 must be equal to length. The maximum value for LB fields is 2,147,483,643, for LA fields 16381, an for other values 253 bytes;
- Segment notation is only allowed for values with the format 'A'.

The following information is returned in the Additions 2 field of the control block:

- The leftmost two bytes contain the number of the byte (in binary format) relative to the beginning of the format buffer where the error was detected.
- The rightmost two bytes contain the name of the field being processed when the error was detected.

Action Correct the specification error and reissue the command or job. For more information about syntax rules for multiple field and periodic group indexing, refer to the Adabas Command Reference documentation.

Response 42

Origin Mainframe systems only

Explanation A space problem occurred. The following are the subcodes and their meanings:

Subcode	Meaning
1	The Work pool was too small to store a user format. *Action:* Increase the LWP specification and retry .
2	The internal format buffer was too small to store a user format (translated into internal structure). *Action:* Increase LFP specification and retry.

Action See the actions described in the subcodes.

Response 43

Origin Mainframe and open systems

Explanation In an L9 command, the descriptor specified in the format buffer did not agree with the descriptor specified in the search buffer.

Action Correct the format buffer or the search buffer.

Response 44

Origin Mainframe and open systems

Explanation The meaning of this response code varies, depending on whether you are using Adabas on mainframe systems or Adabas on open systems.

Mainframe Systems

One of the following format buffer errors occurred (subcodes are shown in the leftmost column):

Subcode	Meaning
1	The specified format is not allowed for an update operation. A possible reason for this is the presence of a conditional format buffer with an update operation.
2	The L9 command's format buffer format is not allowed for other commands.
3	The specified format is not allowed for an update operation. A possible reason for this is the presence of a conditional format buffer with an update operation.
4	The L9 command's format buffer format is not allowed for other commands.
5	Format used for L9 can only contain field and an optional daylight savings time indicator (*fld*D).
6	Fixed point format must have length 2, 4, or 8.
7	Conditional format and more than one format buffer was specified.
8	The current Adabas call provides a different number of format buffers than the format reference by CID.
9	Number of format buffer segments (ABDs) is zero.
10	AAS,AA,AA is invalid.
12	L option specified but the format has no LOB segment with *-position.

Open Systems

One of the following situations occurred:

Subcode	Meaning
1	■ The format buffer is invalid for use with an UPDATE command (A1), ADD command (N1/N2): ■ Format buffer contains overlapping fields, e.g., GL1-3, GL2-4.; ■ Format buffer contains an 1-N element, e.g., GL1-N.; ■ There is not a 1:1 relation between an L element and the subsequent corresponding element with '*' length; ■ A READ command uses a format buffer from the format pool, which was previously used by update or add command, and which contains an invalid conversion.
12	L option is specified but the format has no LOB section with *-position.
13	The format buffer for an A1 commands with command option 2='T' did not contain a last-update-timestamp system generated field.

Note: Subcodes associated with response 44 are stored in the first two bytes of the Additions 2 field (ACB) and in the error subcode field (ACBX).

Action Correct the format buffer or use a different read or update command.

Response 45

Origin Mainframe and open systems

Explanation The meaning of this response code varies, depending on whether you are using Adabas on mainframe systems or Adabas on open systems.

Mainframe Systems

The internal format buffer space has been exceeded. Either the LWP parameter setting is too small or the internal format buffer requires more than 2 G.

Open Systems

Multiple field or periodic group overflowed when using the N suffix in the format buffer for update.

The following information is returned in the Additions 2 field of the control block:

- The first two bytes will contain the number of the byte (in binary format) relative to the beginning of the record where the error was detected;
- The third and fourth bytes will contain the name of the field being processed when the error was detected.

Action The method of resolving the error varies, depending on whether you are using Adabas on mainframe systems or Adabas on open systems.

Mainframe Systems

Increase the size of the LWP parameter and try again. If the problem persists, contact your Software AG technical support representative for assistance.

Open Systems

Because the multiple field or periodic group reached its absolute limit, the application must be redesigned.

Response 46

Origin Mainframe and open systems

Explanation The meaning of this response code varies, depending on whether you are using Adabas on mainframe systems or Adabas on open systems.

Mainframe Systems

Subcode	Meaning
1	Too many TBLES elements for this user.
2	The maximum value for the NQCID parameter was exceeded (the number of TBI and/or TBQ elements is greater than NQCID).

Open Systems

Mismatch of format buffer usage for the supplied command ID.

- A command ID of global ID format buffer has been found in the format pool and has a different file number to the file supplied by the caller;
- The file number was changed in subsequent Adabas calls with the same normal or global command ID.

Action

The method of resolving the error varies, depending on whether you are using Adabas on mainframe systems or Adabas on open systems.

Mainframe Systems

Adjust the size of the NQCID parameter and try again.

Open Systems

Check the command IDs used in the call and try again.

Response 47

Origin

Mainframe and open systems

Explanation

The maximum value for the NISNHQ parameter was exceeded. The following subcodes appearing in the low-order (rightmost) two bytes of the ACB's Additions 2 field or in the ACBX's Error Subcode (ACBXERRC) field provide more detailed information.

Subcode	Meaning
1	An attempt was made to put too many ISNs in hold. The maximum number of ISNs that can be put in hold is specified by the NISNHQ parameter and can be overridden via the Additions-4 field (bytes 3-4) of the user's OP command and via the user profile. *Action:* Increase the value of the NISNHQ parameter or the maximum number of ISNs that the user can put in hold specified in the Additions-4 field (bytes 3-4) of the OP command or in the user profile. Alternatively, modify the application program to store fewer ISNs in hold at the same time.
2	The hold queue was full. If another user has put the maximum number of ISNs in hold, that other user is backed out and will next receive response

Subcode	Meaning
	code 9, subcode 1. The user who is given the response code 47 is not backed out; this user should issue an ET or BT command to release the ISNs from hold. *Action:* Increase the value of the NH parameter. Alternatively, modify the application program to store fewer ISNs in hold at the same time.

Action Increase the value of the NISNHQ parameter by modifying its ADARUN parameter value in the nucleus startup file, or (on open systems) using ADAOPR.

Response 48

Origin Mainframe and open systems

Explanation An error occurred during the processing of a command such as OP or N1. Refer to the hexadecimal subcode that appears in the low-order (rightmost) two bytes of the ACB's Additions 2 field or in the ACBX's Error Subcode (ACBXERRC) field.

Subcode	Meaning
	File(s) not available at open time. This is the default message displayed with this response code if another subcode is not provided.
1	A specified file is locked against the requested use.
2	A specified file is currently in conflicting use.
3	A utility cannot start because an online save operation is in progress.
4	A specified file is already locked or being used by an EXU/EXF or utility user. Use operator command DLOCKF to display file locks, DNFV to display a summary of the current file usage.
5	A utility requiring exclusive database control cannot start because an online save operation is in progress.
6	A utility that requires exclusive database control cannot start because the user queue is not empty.
7	The requested file lock cannot be granted because the file is being used. Use operator command DNFV to display a summary of the current file usage, DFILES to display current users of the file.
8	The user ID specified in the open (OP) command is already in use by another user.
9	An EXU/EXF/UTI lock was requested in the open command, but the file is currently in the file list of a user in UPD/EXU/EXF/UTI status.
10	An EXF/UTI lock was requested in the open command, but the file is currently in the file list of a user in ACC status.
11	A nonprivileged user issued an open (OP) command to a nucleus in UTIONLY (utilities only) status.
13	Online file save attempting to run on an advance-locked file.

Subcode	Meaning
14	UPD/ACC open attempted against advance-locked file.
15	A file requested for an online utility (Adabas Online System or ADADBS) or an E1 program refresh is currently being used.
16	ACODE or WCODE was specified in the record buffer on the command but the nucleus was not activated with UES support.
17	A specified file is locked against the requested use and is advance-locked. The data in the file is not accessible. This can happen if a utility aborts or an autorestart fails.
18	On mainframe systems, this means that a second command was issued by a user who is participating in a two-phase commit (preliminary ET completed; final ET outstanding) or whose transaction has been heuristically terminated. On open systems, this means that the index of the specified file is not accessible. This can happen if a utility aborts or if the index has been disabled by ADAREC REGENERATE or an autorestart.
19	The file number is zero or is greater than the maximum number of files allowed for the database (based on the MAXFILES parameter setting when the database was defined using the ADADEF utility).
20	A regenerate/backout with exclusive database control is rejected because there are in-doubt transactions or heuristically terminated transactions on Work part 4.
21	File is locked for utility usage.
22	An attempt was made to release an advance-lock, but the lock was not set.
23	An advance-lock operation was attempted for a file that has not been loaded.
24	An advance-lock operation was attempted for a file that is already advance-locked.
25	This subcode is issued by Adabas Transaction Manager. The client session has an open global transaction that could not be backed out because it is under the control of an external transaction coordinator and its status is “in doubt”. Depending on the transaction coordinator, you may have a choice of actions: ■ Wait for the external transaction coordinator to complete or back out the existing transaction. ■ Use the coordinator’s facilities to force completion or removal of the transaction. ■ Restart the transaction coordinator to cause resynchronization of in-doubt transactions. ■ Use ATM Online Services to force backout of the local, Adabas-related part of the global transaction.

Subcode	Meaning
	Caution: Using ATM Online Services to force backout of the local, Adabas-related part of the global transaction could result in loss of transaction integrity.
26 - 30	Reserved for Adabas Transaction Manager. These subcodes are given only when Adabas Transaction Manager is in use. Please read the Adabas Transaction Manager documentation for more information.
31	File locked for normal usage
32	A file is in use by an exclusive update (EXU) user. An update request from another user is not permitted.
33	A file is locked for exclusive file control (EXF) or utility update (UTI) usage. The request from a user with a different type is not permitted.
34	An advance-lock operation was performed on a read-only nucleus.
35	An advance-lock operation was performed during an online save.
36	Nucleus in REGENERATE/NOAUTOBACKOUT state.
257 - 260	Reserved for use by Event Replicator for Adabas on open systems.

On open systems, the corresponding file number is returned in the first two bytes of the Additions 2 field in binary format except for value 8 in the third and fourth byte. The value 0 means the whole database.

Action

The following user actions are possible:

- Wait for the other user or utility to finish, then retry the command.
- Make the file available for all users (on open systems, if value 16 occurred in bytes 3 and 4).
- Restore or unlock the file (on open systems, if value 17 occurred in bytes 3 and 4).
- Rebuild the file's index (on open systems, if value 18 occurred in bytes 3 and 4).
- On open systems, if the value in bytes 3 and 4 of the Additions 2 field is 8, and the nucleus was started with the OPEN_REQUIRED option, you can reissue the OP command immediately. This will cause the other user with the same user ID to be stopped, unless that user is currently active.
- On open systems, if a utility receives a response 48 because non-utility users are still active, you can lock the file with ADAOPR LOCK. This ADAOPR command stops all non-utility users from accessing the file and allows only utility users to access the file until it is unlocked again.

  On mainframe systems, if a utility receives a response 48 because non-utility users are still active, you can lock the file with ADADBS MODFCB FILEREADONLY. The FILEREADONLY command stops all non-utility users from accessing the file and allows only utility users to access the file until it is unlocked again.

Response 49

Origin Mainframe and open systems

Explanation The compressed record was too long. It exceeds the maximum permitted compressed record length for the file.

On open systems, the first two bytes of the Additions 2 field contain the length of the compressed record in binary format.

On mainframe systems, the following subcodes may be indicated:

Note: This response code always means that the compressed record is too long and there are duplicate meanings for subcodes but the subcode can help your Software AG technical support representative analyze where in the code we are giving the response. This can be useful for debugging purposes. Please always provide the subcode when communicating about this response code with your Software AG technical support representative.

Subcode	Meaning
	File(s) not available at open time. This is the default message displayed with this response code if another subcode is not provided.
1	Multiple-value (MU) field.
2	Periodic (PE) group field.
3	MU field.
4	PE group.
5	PE group level.
6	Remaining fields.
7	Record too long for protection logging (internal error).
8	A compressed record exceeds the permitted length. The error was detected when updating a multiple field.
9	Exceeded segment length maximum.
10	Long alpha or wide field.
11	New compressed record too long
12	Old version MU update.
13	The MU field was defined with an index
14	An MU update caused the compressed record to become too long.
15	An MU update caused the compressed record to become too long.
16	An MU update caused the compressed record to become too long.
17	MU update, MU count > 1
18	An update to an LA field caused the compressed record to become too long.
19	LOB value too long. An attempt was made to update a LOB value segment that ends after the maximum allowed length of LOB valus. This response code/subcode combination is produced as a result of an L1/L4 command

Subcode	Meaning
	with Command Option 2 set to "L" but with the ISN Lower Limit value grater than or equal to the length of the LOB value being read.
20	Compressed Data Sorage record too long. A LOB update attempted to make a long LOB value (greater than 253 bytes) short (less than or equal to 253 bytes), but the base record was too long to embed the short LOB value. This condition was detected when the LOB value was being read from the LOB file.
21	Compressed Data Storage record too long. A LOB update attempted to make a long LOB value (greater than 253 bytes) short (less than or equal to 253 bytes), but the base record was too long to embed the short LOB value. This condition was detected when an attempt was made to insert the short LOB value into the base record.
90	Segment too long
96	Compressed record too long
99	Exceeded segment length maximum

Action

On open systems, add a new DATA extent with sufficient block size (block size >= compressed record size + 8). Alternatively you can start the nucleus with OPTIONS=AUTO_EXPAND; then the Adabas nucleus automatically creates a new DATA extent with sufficient block size.

Response 50

Origin

Mainframe and open systems

Explanation

A syntax error in the record buffer was detected during processing of an OP command, an invalid character set was specified, an invalid time zone was specified, or an invalid file number (zero or greater than maxfiles) was specified.

On open systems, the first two bytes of the Additions 2 field contain the number of bytes (in binary format) relative to the beginning of the record buffer where the error was detected. If a time zone problem occurs, the two right-most bytes of the Additions 2 field in the ACB will contain a subcode; in an ACBX, the Error Subcode field will contain the subcode.

Subcode	Meaning
31	Time zone not found in ADAZON directory. The specified time zone was not found in the ADAZON directory. Verify the time zone was specified correctly. If it was, contact your Software AG technical support representative for assistance.
32	Time zone pool full. No more time zone information could be loaded. Increase the size of the ADARUN LTZ parameter and restart the nucleus.
33	Open error on DD:TZINFO(MEMBER). Contact your Software AG technical support representative for assistance.

Subcode	Meaning
34	I/O error on DD:TZINFO(MEMBER). Contact your Software AG technical support representative for assistance.
35	Invalid data in TZ file. Contact your Software AG technical support representative for assistance.
36	Invalid transition time in TZ file. Contact your Software AG technical support representative for assistance.

Action Correct the record buffer and try again.

Response 51

Origin Mainframe and open systems

Explanation An error in the record buffer was detected during processing of an OP command.

One of the keywords EXU, UPD, ACC or WCHARSET is duplicated.

On open systems, the following information is returned in the Additions 2 field of the control block:

- the first two bytes contain the number of bytes (in binary format) relative to the beginning of the record buffer where the error was detected;
- the third and fourth bytes contain the open mode that failed (ACC =1, UPD = 2, EXU = 4, WCHARSET = 128)

Action Correct the record buffer and try again.

Response 52

Origin Mainframe and open systems

Explanation The meaning of this response code varies, depending on whether you are using Adabas on mainframe systems or Adabas on open systems.

Mainframe Systems

One of the following errors occurred while processing the record, value, or search buffer. In an ACB, the rightmost two bytes of the Additions 2 field contain the subcode; for subcodes 1-5, the leftmost two bytes contain the Adabas name of the field where the error occurred. In an ACBX, the subcode is stored in the Error Subcode (ACBXERRC) field; for subcodes 1-5, the Adabas field name where the error occurred is stored in the Error Character Field (ACBXERRB).

Subcode	Meaning
1	Invalid packed or unpacked decimal value in record buffer.
2	Invalid length for variable-length field specified in record buffer.
3	Invalid null value or no value at all provided for field with NN option.
4	Invalid value for S element in record buffer.
5	Invalid value for S element in value buffer.
6	Encoding a collation descriptor value failed: the collation descriptor exit issued a return code.
7	Decoding a collation descriptor value failed: the collation descriptor exit issued a return code.
99	An invalid field length was specified.

Open Systems

- The value of a G format field was not in floating point format;
- The value of a P format field was not in packed decimal format;
- The value of a U format field was not in unpacked decimal format;
- A variable-length field was specified without a length parameter;
- The SQL null value indicator (S element) has a value of less than -1;
- A field with the NN option is forced to take the SQL null value;
- The resulting value exceeds 4 bytes (longword) if the format is F, or exceeds the maximum (format dependant) length;
- No record with the specified ADAM key was found.

The following information is returned in the Additions 2 field of the control block:

- The first two bytes contain the number of the byte (in binary format) relative to the beginning of the record/value buffer where the error was detected. This value is -1 if a field with the NN option is forced to take the SQL null value.;
- The third and fourth bytes contain the name of the field being processed when the error was detected.

Action Correct the format, record, value, or search buffer and try again.

Response 53

Origin Mainframe and open systems

Explanation The meaning of this response code varies, depending on whether you are using Adabas on mainframe systems or Adabas on open systems.

Mainframe Systems

One of the following errors occurred:

Subcode	Meaning
0	The record buffer is too small. *Action:* If the record buffer size: ■ conflicts with the lengths specified in the format buffer, change either the record buffer size or the format buffer specifications to resolve the conflict. ■ conflicts with the established global format ID (GFID), either release the GFID or change the record buffer size to match the GFID. ■ default is too small to hold the records in the file including the DVT when running the ADAULD utility, increase the size of the record buffer by setting the ADAULD LRECL parameter. See the Adabas Utilities documentation for more information.
1	The record buffer is too small. When locating a variable field in the input record, the required buffer length exceeded the given length. *Action:* Verify that the record buffer content matches the given format and that sufficient space for variable fields is provided in the record buffer.
2	The ISN buffer is too small. *Action:* Increase the size of the buffer.
3	The record buffer is too small. When locating a variable field within a group in the input record, the required record buffer length exceeded the given length. *Action:* Verify that the record buffer content matches the given format and that sufficient space for variable fields is provided in the record buffer.
4	The record buffer is too small. When locating a field with A,* notation in the input record, the required record buffer length exceeded the given length. *Action:* Verify that the record buffer content matches the given format and that sufficient space for variable fields is provided in the record buffer.
6	The record buffer is too small when the actual length of a variable-length field is included.
7	At least one of the record buffers was too small for the data defined in the corresponding format buffer.
8	The referenced existing format buffer requires more space than that given in one of the record buffers. If this subcode occurs using ADACMP DECOMPRESS, the LRECL of the output record is too small.
9	The record buffer for an internal command from ADASCR is too small.
11	The record buffer for an internal command from AOS is too small.
80	The record buffer for an internal command on a file with spanned records is too small.

Subcode	Meaning
99	The record buffer for an internal command within a cluster is too small.
132	The record buffer is too small to accommodate a requested LOB value without truncation.
249	In Adabas Vista, the record buffer provided for an `L9` command with 'I ' option against a partitioned file is not large enough to hold the full list of ISNs. *Action:* Increase the size of the record buffer.

Open Systems

The record buffer was too small, or the ISN buffer was too small for a requested multifetch command. The following information is returned in the Additions 2 field of the control block:

- The first two bytes contain the expected buffer size in binary format. This value is -1 if the command would have exceeded the maximum record size.
- The third and fourth bytes contain the name of the buffer that was too small. ("RB" or "IB"). If the error occurred while using a hyperdescriptor exit, the name of the hyperdescriptor exit is stored here.

Action Increase the record buffer or ISN buffer size, as appropriate.

Response 54

Origin Mainframe and open systems

Explanation The record buffer for a C3, C5, or ET command is too long. The maximum allowed size is 2048 bytes. The following subcodes provide more information:

Subcode	Meaning
1	The record buffer for the C3 command is too long.
2	The record buffer for the C5 command is too long.
3	The record buffer for the ET command is too long.

Action Correct the record buffer specification, then reissue the C3, C5, or ET command.

Response 55

Origin Mainframe and open systems

Explanation The meaning of this response code varies, depending on whether you are using Adabas on mainframe systems or Adabas on open systems.

Mainframe Systems

One of the following occurred:

- During a read-type operation, a field defined with the SQL null (NC) option contained a null value, but the format buffer held no "S" (significant null) indicator for the field.

  In an ACB, the Additions 2 may contain the field name in the leftmost two bytes; the rightmost two bytes may contain the offset into the record buffer. In an ACBX, the Error Character Field (ACBXERRB) may contain the field name; the Error Offset in Buffer (ACBXERRA or ACBXERRG) fields may contain the offset into the record buffer.

- Attempted format conversion was not possible due to incompatible data formats or other compatibility problems.

  In an ACB, the Additions 2 will contain the field name in the leftmost two bytes; the rightmost two bytes will contain the offset into the record buffer. In an ACBX, the Error Character Field (ACBXERRB) will contain the field name; the Error Subcode (ACBXERRC) field will contain the subcode.

Subcode	Meaning
0	Conversion error on record decompression.
1	Invalid conversion between formats.
2	Invalid length for fixed encoding. For example, user encoding Unicode with code-point size of 2 bytes and no even length specified.
4	Conversion error of a floating-point field (underflow) when converting to/from a non-IBM floating-point format.
5	One of the following conditions exists: ■ Format conversion of a field with the NV option is not allowed. ■ In a read command (Lx, Sx), the format buffer of a field containing a null value is defined with the NC option, but without the NN option, and is missing the SQL significance indicator (S). For read-type commands, the S indicator is required when the NC fields are defined without the NN option. If the S indicator is not present when a read command detects an NC-specified field and the field actually contains a null value, this response code and subcode are returned.
6	An invalid length was specified (for example, a wide character field in Unicode encoding must have an even length).
7	Invalid conversion between formats (different case than subcode 1).
8	Conversion error of a floating-point field (overflow) when converting to/from a non-IBM floating-point format.
9	A one-byte field was provided in the record buffer for the occurrence count of an MU field or PE group in a file with extended MU/PE limits. A two-byte occurrence count value is expected.
10	A field using the NC field option has a null value and no S indicator was specified in the format buffer.
20	Unsupported date-time conversion -- internal error.

Subcode	Meaning
21	Date-time value outside valid range. The valid range depends on the date-time edit masks being used in the format or search buffer and the FDT.
22	Invalid local time – (non-existing local time in the gap that occurs when switching from standard to daylight saving time or when the time zone advances GMT offset)
23	Year outside range of 1-9999.
24	Month outside range of 1-12.
25	Day outside range of 1-n.
26	Hours outside range of 0-24.
27	Minutes outside range of 0-59.
28	Seconds outside range of 0-59.
30	Accessing a field defined with option TZ but no time zone was specified in the user session. Issue the OP command with TZ='*timezone*' parameter in the record buffer to set the time zone for the user session.
31	Invalid daylight saving offset given (*fld*D) for date-time and time zone.
n	Data between user and system data representation could not be converted without error and 2-byte error code from ECS.
254	Numeric field length in format shorter than the field length in the FDT.
255	Field length exceeded maximum for variable fields.

Entire Conversion Service (ECS) error codes are described in *Entire Conversion Service (ECS) Errors*, elsewhere in the Adabas Messages documentation.

Open Systems

A format, length conversion, or truncation error occurred while processing field values in the record buffer or value buffer.

- The value for an FI field is too long;
- The resulting value exceeds the border of the FI field;
- Truncation error of numeric field;
- Truncation of alphanumeric fields or truncation of numeric fields which are converted to alphanumeric, except when OPTIONS=TRUNCATION is enabled in ADANUC;
- A value defined without LA or L4 option with variable length is larger than 253 bytes. This may happen for Unicode fields after conversion to another encoding.
- The length specified for a Unicode field for a character set with fixed character length is not a multiple of the character length: in particular, the length for UTF-16 based character sets must be a multiple of 2, and the length for UTF-32 based character sets must be a multiple of 4;
- The specified value is not a valid date/time value;

- The field does not contain a valid date/time value. This can happen if the value was stored without a date/time edit mask;
- A date/time field with option TZ was specified in the format or search buffer, but there was no time zone specified in an OP command for the current Adabas user session;
- The attempted format conversion was not possible due to incompatible data formats or other compatibility problems.

The following information is returned in the first two bytes of the Additions 2 field, and in the case of an ACBX, also in the field ACBXERRC:

Subcode	Meaning
0	Conversion error.
1	Truncation error.
2	Internal structure error.
5	Internal error.
20	Unsupported DATETIME conversion.
21	Date/time value outside valid range. The valid range depends on the date-time edit masks being used in the format or search buffer and the FDT.
22	Date/time value specified in gap when switching from standard time to daylight saving time.
24	Month not between 1 and 12.
25	Day not between 1 and n, where n is the number of days of the month specified.
26	Hours not between 0 and 24.
27	Minutes not between 0 and 59.
28	Seconds not between 0 and 59.
30	Internal error: missing time zone element for conversion with time zone.
31	Invalid daylight saving offset given (fldD) for date/time and time zone.

The field name is returned in the third and fourth byte of the Additions 2 field, and in the case of an ACBX in the field ACBXERRB.

In addition, the following information is returned in the case of an ACBX call:

- The offset in the record or value buffer in ACBXERRA;
- The type of buffer in ACBXERRD ('R' for error in record buffer, 'V'for error in value buffer).

Action

Depending on the reason:

- Correct the appropriate buffer and try again;
- If the time zone specification in the OP command is missing, execute an appropriate OP command;

- On open systems, if a record structure error is indicated, run ADAVFY FIELD against the corresponding file. If this produces errors, then the file must be unloaded, decompressed, recompressed and reloaded;
- On open systems, subcodes 2 and 5 should never occur; you should, therefore, contact your nearest support center if you receive one of these subcodes. A copy of the command log and an export copy or backup of the files accessed will help us to analyze the problem.

Response 56

Origin Mainframe and open systems

Explanation One of the following occurred:

Subcode	Meaning
.	The descriptor value was too large. Descriptor values are limited to 1144 bytes.
n	The collation value exceeded the maximum 253 bytes. The subcode *n* is the collation descriptor exit number.

Action Store a shorter descriptor value or collation value.

On open systems, you also can specify the TR option for the descriptor, which truncates larger descriptor values before they are stored in the index. Note that with the TR option, search results may be inaccurate: this is because values that are identical in the first 1144 bytes are considered to be equal to each other.

Response 57

Origin Mainframe and open systems

Explanation In an L9 command, the descriptor specified in the format or search buffer or in the Additions 1 field was invalid or the descriptor was not specified:

- The field name specified may not be the name of a descriptor.
- The descriptor specified may be a phonetic descriptor or a hyperdescriptor, which are not allowed in an L9 command.
- On open systems, the descriptor specified may be a collation descriptor with the option HE.

Action Correct the descriptor in the format buffer, search buffer, or Additions 1 field and try again.

Response 58

Origin Mainframe systems only

Explanation The format could not be found (as defined within format selection criteria).

Action Adjust the format specification and try again.

Response 59

Origin Mainframe systems only

Explanation Format conversion of a subfield is not possible. The source field has fixed point (F) or floating point (G) format.

Action Correct the field for which you are attempting format conversion and try again.

Response 60

Origin Mainframe and open systems

Explanation The meaning of this response code varies, depending on whether you are using Adabas on mainframe systems or Adabas on open systems.

Mainframe Systems

A syntax error was detected in the format or search buffer. Generally in an ACB, the first two bytes of the Additions 2 field contain the two characters under inspection when the error was detected and the rightmost two bytes of the Additions 2 field in the ACB contain one of the following subcodes. In an ACBX, the Error Character Field (ACBXERRB) contains the two characters under inspection when the error was detected and the Error Subcode (ACBXERRC) field contains one of the following subcodes.

Subcode	Meaning
1	Premature end of search buffer.
2	Syntax error in search buffer; possibly a bad field name.
3	Text literal has no ending quote or is too long (more than 255 characters).
4	Text literal is empty.
5	Expected delimiter missing.
6	Soft coupling criterion has not closing parenthesis (")").
7	Soft coupling criterion is empty.
8	Invalid field name, format, or search operator.
9	Invalid edit mask number (greater than 15).
10	Invalid character following field name specification.
11	Invalid specification of MU field in PE group.
12	Expected number missing or too large (greater than 2^{31}).
13	Syntax error in LOB segment specification.
14	Syntax error in length indicator notation (L) specification.

Subcode	Meaning
15	Syntax error in daylight savings time notation (D) specification.
16	Invalid date-time edit mask specification.
17	MU/PE index range specification is invalid for LOB segment notation.

Open Systems

A syntax error was detected in the search buffer.

The following information will be returned in the Additions 2 field of the control block:

- The first two bytes will contain the number of the byte (in binary format) relative to the beginning of the search buffer where the error was detected;
- The third and fourth bytes will contain the name of the field being processed when the error was detected.

Action Correct the format or search buffer and try again.

Response 61

Origin Mainframe and open systems

Explanation An error was detected in the search buffer, value buffer, or during an S8 command.

Mainframe Systems

On mainframe systems, one of the following subcodes may also be included with this response code:

Subcode	Meaning
2	An invalid value operator was detected in the search buffer.
3	An invalid logical operator was specified for an S8 command - Command Option 2.
7	This subcode indicates that one of the following errors occurred: ■ The length of a descriptor value was greater than 253. ■ Invalid file number specification. ■ Invalid selection criteria for an Event Replicator for Adabas initial-state definition. ■ Invalid usage of the "S" or "N" operator. ■ The element order was invalid. ■ The specified field was not a descriptor. ■ The specified field has the "LA" option active.

Subcode	Meaning
	■ A descriptor contained in a periodic group was specified without an index. ■ Invalid connection of partial criteria or different indices were used for a descriptor contained within a periodic group. ■ Invalid periodic group index. ■ Invalid or disallowed use of a phonetic descriptor. ■ A descriptor derived from or contained in a periodic group is not allowed. ■ The FROM-TO operator was specified with a phonetic descriptor. ■ Invalid FROM-TO range specification, or the FROM value was greater than the TO value. ■ The BUT-NOT value was outside the range of the preceding FROM-TO range. ■ An invalid command option was specified for ISN LIST processing (S8 command). ■ The search buffer "S" significant null indicator was specified with a value operator other than "EQ" (equals), which is not allowed.
8	An invalid FROM-TO range was specified. The BUT-NOT value was outside the range of the preceding FROM-TO value.
9	An invalid search criteria was specified.

Open Systems

On open systems, an error was detected in the search or value buffer, or during an S8 command:

- Invalid command option 2 specified for ISN LIST processing (S8 command);
- Invalid element or element order;
- The specified field was neither a descriptor, subdescriptor, superdescriptor nor a phonetic descriptor;
- Invalid connection of partial criteria and/or different indices used for a descriptor contained within a periodic group;
- Invalid use of a phonetic descriptor;
- Invalid periodic group index;
- Invalid index usage;
- The length of a descriptor value was greater than 253 or greater than the permitted length for the required format;
- Invalid format type;
- Invalid file number specification;
- Invalid usage of the S operator - FROM value greater than TO value;

- Invalid usage of the N operator - BUT NOT value was outside the range of the preceding FROM-TO range;
- Invalid comparator;
- The value in the value buffer cannot be converted into the field's FDT format;
- The specified file name is not an ADAM key while using the V option with an A1 or E1 command;
- Invalid value given in the value buffer while using the V option with the A1 or E1 command;
- Invalid usage of the C option - only allowed for collation descriptors;
- A field was specified with an edit mask that is not allowed for the field.

The following information is returned in the Additions 2 field of the control block (not for the S8 command):

- The first two bytes will contain the number of the byte (in binary format) relative to the beginning of the search buffer where the error was detected;
- If the third byte is zero, the fourth byte contains more information about the error:
  - Fourth byte 1: invalid length.

  Otherwise the third and fourth bytes will contain the name of the field being processed when the error was detected.

Action Correct the search or value buffer or S8 command and try again.

Response 62

Origin Mainframe and open systems

Explanation One of the following has occurred:

- The length of the search or value buffers as specified in the search and value buffer length fields, respectively, was not sufficient to accommodate the search criteria specified.
- The first character in the search buffer was a period (.).
- The search buffer does not contain a period (.).

Action Correct the search or value buffer and try again.

Response 63

Origin Mainframe and open systems

Explanation The command ID value specified in the search buffer was invalid.

On open systems, the value in the first two bytes of the Additions 2 field indicates the reason (2 byte binary format):

Subcode	Meaning
1	The command ID value specified in the search buffer was not found.
2	The associated ISN list is not sorted in ISN sequence (it has been generated by an S2/S9 command).
3	The command ID was not used in the previous FIND in which the SAVE ISN LIST option was used.

Action Correct the command ID in the search buffer and try again.

Response 64

Origin Mainframe systems only

Explanation This response code is used for communication with Adabas utilities and Adabas Online System (AOS), and was returned because the requested function could not be performed or an error occurred in an AOS or utility function.

Action The subcode may be in the ADADBS output or may be displayed by AOS.

If you do not understand the action to take for a response code 64 or subcode, note the subcode and the function that caused the response code, and call your Software AG technical support representative for assistance.

Response 65

Origin Mainframe systems only

Explanation An internal error occurred. The nucleus detected a space calculation error.

Action Contact your Software AG technical support representative for assistance.

Response 66

Origin Mainframe systems only

Explanation An incompatible owner ID was detected during an update operation on a multiclient file. The owner ID may be blank, or too long.

Action Contact your Software AG technical support representative for assistance.

Response 67

Origin Mainframe systems only

Explanation One of the following errors occurred:

Subcode	Meaning
.	An internal error occurred while executing an S*x* command.
2	An error occurred during superfield generation.

Action Retain all related information, and contact your Software AG technical support representative for assistance.

Response 68

Origin Mainframe systems only

Explanation A nondescriptor field was used as a search criterion, and the non-descriptor search facility has been set OFF (the default for this facility is ON).

Action The ADARUN parameter NONDES has been set to reject non-descriptor searches; either reset the NONDES parameter to its default value, or remove non-descriptor searches from your application. Natural provides a trace facility which locates such Natural application characteristics. Contact Software AG for details.

Response 70

Origin Mainframe systems only

Explanation An overflow occurred in the table of sequential commands.

Action The DBA may increase the value used for the LQ parameter or RC commands may be used.

Response 71

Origin Mainframe systems only

Explanation An overflow occurred in the table of resulting ISN lists.

Action The DBA may increase the value used for the LI parameter or RC commands may be used.

Response 72

Origin Mainframe and open systems

Explanation One of the following errors occurred:

Subcode	Meaning
6	The NU parameter is too small for the execution of a session autorestart. It is smaller than it was in the previous Adabas nucleus session that failed. In a cluster nucleus, the NU parameter is smaller than in the nucleus that had established the global lock structure.
7	An overflow occurred in the user queue.
8,9	An overflow occurred in the user queue file list pool.

Action The DBA may increase the value used for the NU parameter.

Response 73

Origin Mainframe and open systems

Explanation An overflow occurred in the section of the Work data set (mainframe systems) or the temporary working space (open systems) in which resulting ISN lists are stored.

On open systems, please note that for read-only databases, temporary working space is only created if a location for it is explicitly specified (environment variable TEMPLOCn or entries for TEMPORARY_LOCATION in the file *DBnnn.INI*); otherwise only some of the space in the Adabas buffer pool is used for storing the ISN lists.

Action On mainframe systems, the DBA may increase the size of the Work data set and/or the number of saved ISN lists during an Adabas session may be decreased.

On open systems, provide enough temporary working space. For read-only databases, specify the location for the temporary working space explicitly or increase the size of the Adabas buffer pool (ADANUC parameter LBP).

Note: The processing of ISN lists was changed for Adabas Version 5.1. If you get this error with an Adabas Version 3 database, please refer to the Adabas Version 3 documentation.

Response 74

Origin Mainframe and open systems

Explanation No space was available on the Work data set for complex find commands.

Action On open systems, increase the size of the Work data set.

On mainframe systems, increasing the size of the Work data set alone will not solve this problem. Instead, set the value of LWKP2 (WORK-PART-2) to a higher value than the calculated one (whatever that might be). Then increase the size of the Work data set to ensure there is sufficient space for WORK-PART-3.

Response 75

Origin Mainframe and open systems

Explanation Attempts to allocate additional Associator or Data Storage extents for a file were issued, but the maximum number of extents that can be handled by the FCB have already been allocated.

On mainframe systems, BT (backout) or autorestart processing could cause the file to be locked because of inadequate extent space (see response code 48, ADARSP048).

On open systems, the last extent is allocated only for a command which is being backed out and for AUTORESTART and ADAREC REGENERATE. The first two bytes of the Additions 2 field contain the highest possible extent number (in binary format). The third and fourth bytes indicate where the overflow occurred. Possible values are: "DS" (Data Storage), "AC" (Address Converter), "NI" (Normal Index) and "UI" (Upper Index).

Action On mainframe systems, ask your DBA for assistance; Associator or Data Storage extents may have to be reallocated.

On open systems, unload the file and reload it with appropriate initial allocations.

Response 76

Origin Mainframe and open systems

Explanation An overflow occurred in an inverted list index (the maximum is 15 levels).

Action Unload and reload the file with an appropriate padding factor for the Associator.

Response 77

Origin Mainframe and open systems

Explanation Sufficient space was not available for a required Associator or Data Storage extent.

On mainframe systems, the following subcodes further define the error:

Subcode	Meaning
1	FST empty.
2	AC START RABN not available.
3	AC END RABN not available.
4	FST will not fit into five ASSO blocks.
5	FST exhausted trying to allocate AC extent.
6	ASSO space allocation RABN not on device.
7	ASSO space on required device not available.
8	FROM RABN available, but contiguous space is not sufficient.
9	Data Storage space of the requested size is not available.
10	Data Storage space on the same device as the previous extent is not available.

Subcode	Meaning
11	FST is empty, or data storage for the current MAXRECL value is not available.
12	FST empty.

On open systems, the third and fourth bytes of the Additions 2 field contain either "AS" (Associator) or "DS" (Data Storage). You can also get the response 77 if you specified an explicit RABN for an Associator or Data Storage extent and the requested space is not available at the requested RABN. Please note that Adabas distinguishes between small (< 16KB) and large (>= 16KB) index blocks. This means that a response 77 can be returned even though there are enough free Associator blocks, but the free Associator blocks have the wrong size.

Action

On mainframe systems, ask your DBA for assistance; Associator or Data Storage extents may have to be reallocated.

On open systems, add a new Associator or Data Storage extent to the database using the ADADBM utility or specify a RABN where the requested space is available.

Note: Response 77 can sometimes be prevented by enabling database autoexpand to execute in the online mode (specify the open systems nucleus parameter OPTIONS=AUTO_EXPAND).

Response 78

Origin

Mainframe and open systems

Explanation

The meaning of this response code varies, depending on whether you are using Adabas on mainframe systems or Adabas on open systems.

Mainframe Systems

The cause of this response is indicated by one of the following subcodes:

Subcode	Meaning
1	The AC file cannot be increased; only one file extent is permitted.
2	The file contains more than either 4 billion or 16 MB of ISNs, depending on the ISN length, or if ISNREUSE is in effect, the file has reached TOPISN and is very fragmented and too much effort would be needed to search for a free ISN.

Open Systems

An overflow occurred in the free space table (FST) as a result of Associator or Data Storage fragmentation, or the maximum number of DSST extents has already been allocated.

Action

The method of resolving the error varies, depending on whether you are using Adabas on mainframe systems or Adabas on open systems.

Mainframe Systems

If the file has reached the 16-MB limit, you might convert it to a file with the 4-byte ISN option or to an expanded file. If ISNREUSE is in effect, ADABAS ISNREUSE=ON, RESET can be used to reset the rotating ISN pointer or the file can be reloaded to eliminate the fragmentation.

If the file has NOACEXTENSION specified, look for alternatives to increase the file size such as adding an additional file to the expanded file chain. If the file is not part of an expanded file chain, you may want to reload the file to remove the restriction.

Open Systems

If it is an FST problem, reorder the database. If it is a DSST problem, which can only occur in the context of a utility, refer to the message DSSTALL for further information.

Response 79

Origin Mainframe and open systems

Explanation The meaning of this response code varies, depending on whether you are using Adabas on mainframe systems or Adabas on open systems.

Mainframe Systems

A collation descriptor exit or hyperdescriptor exit error occurred. The following table describes the possible subcodes for this response code and their meanings:

Subcode	Meaning
1	Either a collation descriptor exit (subcode CDX*n* where *n* is the one-byte binary collation descriptor exit number) or a hyperdescriptor exit ("hyperdescriptor exit") was not specified ADARUN.
5	The hyperdescriptor exit stub was called for an extended MU/PE file.
6	Improper use of the parameter list was detected by the Hyperdescriptor Exit Stub. The most likely reason is that a hyperdescriptor exit using the Adabas 8 parameter structures is linked to the Hyperdescriptor Exit Stub.
7	The Hyperdescriptor Exit Stub could not resolve the HEXOLD external reference.
8	Improper use of the parameter list was detected. The second word of the parameter list was modified.
9	A hyperdescriptor exit did not return an output parameter area address.
10	A hyperdescriptor exit rejected the call by setting a nonzero return code in the output parameter header.

Open Systems

A hyperdescriptor exit is not available to the nucleus. The following information is returned in the Additions 2 field of the control block:

- The first two bytes contain the number of the hyperdescriptor exit,;
- The third and fourth bytes contain the name of the hyperdescriptor.

Action

The method of resolving the error varies, depending on whether you are using Adabas on mainframe systems or Adabas on open systems.

Mainframe Systems

The following table describes the actions you should take for each possible subcode for this response code:

Subcode	User Action
1	Reissue ADARUN with the CDX*nn* or HEX*nn* parameter. For more information about ADARUN parameters, read *Adabas Initialization (ADARUN Statement)*, in *Adabas Operations Manual*; for more information about user exits and hyperdescriptor exits, read *User Exits and Hyperdescriptor Exits*, in *Adabas User, Hyperdescriptor, and Collation Descriptor Exits Manual*.
5	The Hyperdescriptor Exit Stub may not be used with extended MU/PE files. For more information about hyperdescriptor exits, read *User Exits and Hyperdescriptor Exits*, in *Adabas User, Hyperdescriptor, and Collation Descriptor Exits Manual*.
6,7	Investigate the Hyperdescriptor Exit Stub link job. For more information about hyperdescriptor exits, read *User Exits and Hyperdescriptor Exits*, in *Adabas User, Hyperdescriptor, and Collation Descriptor Exits Manual*.
8	A likely cause of the error is that a pre-Adabas 8 hyperdescriptor exit was called without a linked Hyperdescriptor Exit Stub. For more information about hyperdescriptor exits, read *User Exits and Hyperdescriptor Exits*, in *Adabas User, Hyperdescriptor, and Collation Descriptor Exits Manual*.
9	Hyperdescriptor exits must return an output parameter area address upon return. For more information about hyperdescriptor exits, read *User Exits and Hyperdescriptor Exits*, in *Adabas User, Hyperdescriptor, and Collation Descriptor Exits Manual*.
10	Investigate the hyperdescriptor exit to determine why the call was rejected.

Open Systems

Define the hyperdescriptor exit and restart the nucleus.

Response 81

Origin Mainframe systems only

Explanation An MU or PE field error occurred, as described by the subcode:

Subcode	Meaning
1	The PE index is greater than 191 (if the maximum number of PE field occurrences is 191).
2	The PE index is greater than 65534 (if the maximum number of PE field occurrences is 65534).
3	The MU index is greater than 65534 (if the maximum number of MU field occurrences is 65534).
4	The MU index is greater than 191 (if the maximum number of MU field occurrences is 191).

Action Correct the MU or PE field problem and try again. If the problem persists, contact your Software AG technical support representative for assistance.

Response 82

Origin Mainframe systems only

Explanation A hyperdescriptor exit routine returned an invalid ISN.

Action Correct the hyperdescriptor exit routine logic and restart the nucleus.

Response 83

Origin Mainframe and open systems

Explanation The meaning of this response code varies, depending on whether you are using Adabas on mainframe systems or Adabas on open systems.

Mainframe Systems

A hypertable overflow occurred.

Open Systems

A hyperdescriptor exit routine returned an invalid ISN.

The following information will be returned in the Additions 2 field of the control block:

- The first two bytes contain the offset the invalid ISN in the specified ISN buffer in binary format;
- The third and fourth bytes contain the name of the hyperdescriptor.

Action The method of resolving the error varies, depending on whether you are using Adabas on mainframe systems or Adabas on open systems.

Mainframe Systems

Open Systems

Correct the hyperdescriptor exit routine and restart the nucleus.

Response 84

Origin Mainframe systems only

Explanation Too many values were present for a subdescriptor or a superdescriptor.

Action Reduce the number of subdescriptor or superdescriptor values and try again.

Response 85

Origin Mainframe and open systems

Explanation The meaning of this response code varies, depending on whether you are using Adabas on mainframe systems or Adabas on open systems.

Mainframe Systems

Too many descriptor values were present for an update or add record command.

Open Systems

The descriptor value table space cannot be allocated from the buffer pool.

Action The method of resolving the error varies, depending on whether you are using Adabas on mainframe systems or Adabas on open systems.

Mainframe Systems

Open Systems

Increase the size of the LBP parameter.

Response 86

Origin Mainframe and open systems

Explanation A hyperdescriptor exit return error occurred for one of the following reasons:

- An incorrect sign for a packed descriptor value was created.
- A value with an incorrect length byte was returned.
- The ISN was changed by an update command.

On open systems, the following information is returned in the Additions 2 field of the control block:

- The first two bytes contain a value. This value can be:

1	the hyperdescriptor pool exceeds the nucleus buffer pool
2	the hyperdescriptor exit has returned an invalid pointer, length or count value
3	an element in the user-defined format buffer is not a parent field of the hyperdescriptor
4 - 255	Adabas response code
>255	user-defined error return for hyperdescriptor exit routine

- The third and fourth bytes contain the name of the hyperdescriptor or the name of the parent field.

Response 87

Origin Mainframe systems only

Explanation The Adabas buffer pool is locked; it is too small to accommodate all blocks needed for (parallel) command execution.

Action Check the length of the buffer pool (LBP) as follows:

Subcode	User Action
1	Check the LBP value with DPARM.
2	Increase the ADARUN LBP parameter value.
3	Retry the operation. If the error recurs, call your Software AG support representative for assistance.

Response 88

Origin Mainframe and open systems

Explanation This response code generally occurs when there is a workpool (LWP) shortage. Sufficient work pool space is not available or the sort work space is too small (even if only one user is active).

On mainframes systems, when this response code occurs, refer to the hexadecimal subcode that appears in the low-order (rightmost) two bytes of the ACB's Additions 2 field or in the ACBX's Error Subcode (ACBXERRC) field. This subcode describes what kind of operation encountered the error.

The following table describes the mainframe subcodes and provides recommended actions.

Subcode	Operation Encountering the Workpool Shortage	Action
1	Only active command is waiting for workpool space.	Increase the ADARUN LWP setting and try again.
	During session autorestart, insufficient workpool or user queue space was encountered.	Increase ADARUN LWP and NU parameter settings and try again.
2	Only active command is waiting for workpool space.	Increase the ADARUN LWP setting and try again.
3	A command waiting for workpool space was interrupted for transaction backout.	
4	A1 command	
5	E1 command	
7	Superfield value generation	
8	N1 command	
9	OP command	
10	Descriptor value generation	
11	Hyperdescriptor value generation	
12		
13	Subdescriptor value generation	
15	DTP=RM: A getmain error during Work-Part-4 initialization.	
16	Hard-coupled file update processing encountered a workpool shortage.	
17	A session autorestart encountered a workpool shortage.	
18	Session autorestart during online recovery in a cluster	
22	Online reorder by descriptor	
23	Online invert	
24	Open one of the Work data sets in a cluster	
25	Session autorestart in a cluster	
79	Work pool shortage during release of advanced lock function.	
80	Work pool shortage during insert (N1/N2-command) of spanned record	
96	Internal command queue full	
98	Cluster with DTP=RM: Recovery of distributed transactions encountered a workpool shortage.	
99	ET command with P-option	
	Descriptor value generation for multi-client file	

Subcode	Operation Encountering the Workpool Shortage	Action
	Single-user mode: Command initialization	
	Replication: Setup of initial-state process	
	DTP=RM: Insufficient user queue space during Work-part-4 initialization	Increase the ADARUN NU setting and try again.

Action For mainframe systems, review the actions described in the table above.

For open systems, verify the parameter values for the database that relate to the working storage allocation. Ask your DBA to increase the size of the LWP or LS parameter, as necessary.

Response 89

Origin Mainframe systems only

Explanation The UQE was already in use, and an attempt was made to execute two commands at the same time for the same user.

Response 94

Origin Mainframe systems only

Explanation An I/O error occurred on DDWORKR4.

Response 95

Origin Mainframe systems only

Explanation An I/O error occurred on the Work LP area.

Response 96

Origin Mainframe systems only

Explanation An error occurred during ADARES REPAIR utility execution.

Subcode	Meaning
2	An I/O error occurred during nucleus termination; Additions 2 may contain RABN.

Response 97

Origin Mainframe systems only

Explanation An I/O error occurred during buffer flush. Additions 2 may contain RABN.

Response 98

Origin Open systems only

Explanation A uniqueness violation of a unique descriptor was detected during a store or update processing if subtransactions are not activated, or otherwise at end of a subtransaction. The third and fourth bytes of the Additions 2 field contain the name of the descriptor which caused the uniqueness conflict.

Action Check the descriptor values.

Response 99

Origin Mainframe and open systems

Explanation An I/O error occurred.

On open systems, the first 2 bytes of the Additions 2 field (in binary format) contain the extent number. The third and fourth bytes contain the container type ("AS" for ASSO, or "DS" for DATA or "WO" for WORK).

Action On open systems, check whether any disk devices have gone offline or check the error log for hardware errors.

Response 101

Origin Mainframe and open systems

Explanation An error has occurred using one of the client-based Adabas add-on products such as Adabas System Coordinator or Adabas Fastpath.

Mainframe Systems

On mainframe systems, one of the following subcodes may also be included with this response code:

- Subcodes of 20 or less are produced by Adabas Fastpath when an error occurs during the processing of an Adabas command..
- Subcodes of 21 or greater are produced by Adabas System Coordinator.

Refer to the hexadecimal subcode that appears in the command's Adabas control block, Additions 2 field, low-order (rightmost) two bytes. The subcodes are described in the table below:

Subcode	Meaning
2	L3/L9 direct optimization internal error. This is an Adabas Fastpath error. The hexadecimal representation for this subcode is "2".
6	L3 direction change error. This is an Adabas Fastpath error. The hexadecimal representation for this subcode is "6".
7	Direction change integrity check error.This is an Adabas Fastpath error. The hexadecimal representation for this subcode is "7".
8	Default response to internal service commands in the database. This is an Adabas Fastpath error. The hexadecimal representation for this subcode is "8".
9	Optional response for Read Ahead Update warning messages. This is an Adabas Fastpath error. The hexadecimal representation for this subcode is "9".
10	Error following a PLEX move. This is an Adabas Fastpath error. The hexadecimal representation for this subcode is "A".
21	Session cleanup error. This is an internal error in Adabas System Coordinator. *Action:* Contact your Software AG technical support representative.
22	You are using the CORS09 client component in a zIIP enabler for Natural environment and Natural zap NA97065 is not applied. *Action:* Apply Natural zap NA97065.
23	Session create error. This is probably due to insufficient memory. *Action:* Increase the job region size. If the problem persists, contact your Software AG technical support representative.
25	CAB: Allocation failed. Insufficient memory was available for CAB. This is an Adabas System Coordinator error. *Action:* Increase the job region size. **Note:** This subcode is not subject to COR Debug.
26	Incorrect use of asynchronous Adabas calls. *Action:* Contact your Software AG technical support representative. **Note:** This subcode is not subject to COR Debug.
28	Internal thread concurrency error. *Action:* Contact your Software AG technical support representative. **Note:** This subcode is not subject to COR Debug.
29	Internal command error: Value buffer is not present. *Action:* Contact your Software AG technical support representative.

Subcode	Meaning
30	Internal command error: Illegal function. *Action:* Contact your Software AG technical support representative.
31	Error allocating the internal job-structure. *Action:* Increase the job region size. If the problem persists, contact your Software AG technical support representative.
32	Internal command error: Insufficient record buffer. *Action:* Contact your Software AG technical support representative.
33	Internal command error: Record buffer is not present. *Action:* Contact your Software AG technical support representative.
34	Internal command error: Incorrect value buffer format. *Action:* Contact your Software AG technical support representative.
35	Memory allocation failure. Insufficient memory was available for an internal area needed for NIM support. This is an Adabas System Coordinator error. *Action:* Increase the job region size. **Note:** This subcode is not subject to COR Debug.
38	Internal command error: Unsupported memory function *Action:* Contact your Software AG technical support representative.
43	Initialization Error. An error occurred during job initialization in Adabas System Coordinator. *Action:* Ensure that correct runtime controls were defined for the job. If problem persists, contact Software AG Support.
46	CAS: No group header record. This error appears if Adabas System Coordinator fails to find a header record for the required System Coordinator group. *Action:* First check that you have a valid CORCFG module pointing to the correct database and file number for your configuration file. Ensure that the load library containing CORCFG is included in the load library concatenation of the job. If CORCFG is present and correct, logon to SYSCOR and verify that you have valid Daemon Group parameters for the job you are running. If all parameters are correct, contact your Software AG technical support representative for assistance.
49	Internal eventing error: Illegal request. *Action:* Contact your Software AG technical support representative.
50	Internal error processing add-on products. *Action:* Contact your Software AG technical support representative.

Subcode	Meaning
53	This job is not defined to use the daemon. *Action:* Review and correct the installation for this job.
54	Internal services error. *Action:* Contact your Software AG technical support representative.
55	Latency processing error. This is an internal error in Adabas System Coordinator. *Action:* Contact your Software AG technical support representative. **Note:** This subcode is not subject to COR Debug.
56	Latency processing error. This is an internal error in Adabas System Coordinator. *Action:* Contact your Software AG technical support representative. **Note:** This subcode is not subject to COR Debug.
59	CORSnn: Critical products. One or more products have been defined as "Critical" in the Corrdinator configuration file, and one of the following errors was detected: ■ The Adabas System Coordinator Kernel module (CORKRN) was not found. ■ Adabas System Coordinator initialization has failed. There will be a Coordinator message indicating the cause of the initialization failure. *Action:* Determine the cause of the concurrent command and modify the application to remove it. **Note:** This subcode is not subject to COR Debug.
60	CORKRN: Critical Products. One or more products have been defined as "Critical" in the Adabas System Coordinator configuration file, and the product has indicated a critical error during initialization. *Action:* Determine the cause of the concurrent command and modify the application to remove it.
62	CORS02/CORS12: Subsystem storage protect facility not activated. Com-plete has been customised to operate with mixed thread keys, but the IBM subsystem Storage Protection override facility is not enabled. Adabas System Coordinator requires this facility to support mixed thread keys in Com-plete. *Action:* Either activate the Subsystem Storage Protection override facility in this system OR change the Com-plete thread groups to operate in Com-plete's key only (see the description of the THREAD-GROUP parameter in the Com-plete documentation).

Subcode	Meaning
	Note: This subcode is not subject to COR Debug.
64	Net-Work Clustering: Node not member of Group. This is an internal error in Adabas System Coordinator. *Action:* Contact your Software AG technical support representative.
65	Net-Work Clustering: Message segment protocol error. This is an internal error in Adabas System Coordinator. *Action:* Contact your Software AG technical support representative.
66	Net-Work Clustering: Message sequence error. This is an internal error in Adabas System Coordinator. *Action:* Contact your Software AG technical support representative.
67	z/OS only: Invalid SVC is being used for the execution of an Adabas call. *Action:* Review and correct the installation. If the problem persists, contact your Software AG technical support representative.
68	z/OS only: The batch Adabas System Coordinator client component (CORS01) is being incorrectly used for a Multi-TCB job. *Action:* Refer to installation step "Add the System Coordinator to the Adabas Client" in the Installation Procedure section of the Adabas System Coordinator Installation documentation for information regarding the available CORS0*n* client components and their applicability to different job types. If the problem persists, contact your Software AG technical support representative.
69	Insufficient memory to initialize runtime controls. There is insufficient memory for COR to initialize. This is an Adabas System Coordinator error. *Action:* Increase the memory available to the job.
81	Internal UB Getmain error. This is an internal error in Adabas System Coordinator. *Action:* Contact your Software AG technical support representative.
82	Invalid session pointer. This is an internal error in Adabas System Coordinator. *Action:* Contact your Software AG technical support representative.
83	Internal session UB not found. This is an internal error. *Action:* Contact your Software AG technical support representative.

Subcode	Meaning
84	Internal error in Adabas buffer analysis. This is an internal error in Adabas System Coordinator. *Action:* Contact your Software AG technical support representative.
85	Internal thread getmain error. This is an internal error in Adabas System Coordinator. *Action:* Increase the job region size and rerun the job. If the problem persists, contact your Software AG technical support representative.
86	Invalid command block pointer. This is an internal error in Adabas System Coordinator. *Action:* Contact your Software AG technical support representative.
87	Client versioning has not been installed correctly. *Action:* Check the job for any console messages and ensure that client versioning is installed correctly.
88	Adabas CICS link module and TRUE have not been installed correctly. *Action:* Ensure that the Adabas CICS link module and TRUE are installed correctly. This must be done to enable Adabas System Coordinator to operate in a CICS job. **Note:** This subcode is not subject to COR Debug.
89	The NIM subtask is in the process of being detached. *Action:* None, this subcode simply indicates that a NIM subtask was still issuing Adabas commands when it was terminated by the main NIM task. **Note:** This subcode is not subject to COR Debug.
90	Internal handshake token validation error.
91	Latency processing error (no facility). This is an internal error in Adabas System Coordinator. Action: Contact your Software AG technical support representative. *Action:* Contact your Software AG technical support representative.
92	Asynchronous call with no CAB. This is an internal error in Adabas System Coordinator. *Action:* Contact your Software AG technical support representative.
93	Latency processing error (memory). This is an internal error in Adabas System Coordinator. *Action:* Increase the job region size. If the problem persists, contact your Software AG technical support representative. **Note:** This subcode is not subject to COR Debug.

Subcode	Meaning
94	Latency processing lock error. This is an internal error in Adabas System Coordinator. *Action:* Contact your Software AG technical support representative. **Note:** This subcode is not subject to COR Debug.
95	Daemon latency processing error. This is an internal error in Adabas System Coordinator. *Action:* Ensure that the System Coordinator daemon is available. If the client that receives this error is using the COLAT daemon latency disk file to manage their session-related information, then this subcode may be indicative that the disk file is full. If so, check the daemon job log for any accompanying error messages. If the problem persists, contact your Software AG technical support representative. **Note:** This subcode is not subject to COR Debug.
96	Latency processing error (facility deleted). This is an internal error in Adabas System Coordinator. *Action:* Contact your Software AG technical support representative. **Note:** This subcode is not subject to COR Debug.
97	Latency processing lock error when using daemon latency. *Action:* Contact your Software AG technical support representative. **Note:** This subcode is not subject to COR Debug.
102	Latency processing unlock error. This is an internal error in Adabas System Coordinator. *Action:* Contact your Software AG technical support representative. **Note:** This subcode is not subject to COR Debug.
103	Latency processing error for IMS. *Action:* Increase the size of the Daemon latency /pulse services shared memory area size in the COR daemon parameters. **Note:** This subcode is not subject to COR Debug.
200	When running Multi-system dynamic transaction routing (z/OS only), there was an error writing to the Coupling Facility Cache structure. *Action:* Refer to the accompanying COR010S message in the daemon.

Subcode	Meaning
	Note: This subcode is not subject to COR Debug.
201	When running Multi-system dynamic transaction routing (z/OS only), there was an error reading from the Coupling Facility Cache structure. *Action:* Refer to the accompanying COR009S message in the daemon. **Note:** This subcode is not subject to COR Debug.
202	When running Multi-system dynamic transaction routing (z/OS only), an incorrect record was read from the Coupling Facility Cache structure. *Action:* Contact your Software AG technical support representative. **Note:** This subcode is not subject to COR Debug.
203	When running Multi-system dynamic transaction routing (z/OS only), there was a memory shortage in the local daemon when attempting communications with a peer daemon. *Action:* Increase the region size for the daemon. If the problem persists, contact your Software AG technical support representative. **Note:** This subcode is not subject to COR Debug.
204	When running Multi-system dynamic transaction routing (z/OS only), there was a protocol error in the local daemon when attempting communications with a peer daemon. *Action:* Contact your Software AG technical support representative. **Note:** This subcode is not subject to COR Debug.
205	When running Multi-system dynamic transaction routing (z/OS only), a peer daemon returned an error when contacted by the local daemon. *Action:* Contact your Software AG technical support representative. **Note:** This subcode is not subject to COR Debug.
206	When running Multi-system dynamic transaction routing (z/OS only) and attempting to move a facility across the Sysplex, there was an internal problem identifying the correct facility. *Action:* Contact your Software AG technical support representative. Note: This subcode is not subject to COR Debug. **Note:** This subcode is not subject to COR Debug.

Subcode	Meaning
207	When running Multi-system dynamic transaction routing (z/OS only) and attempting to move a facility across the Sysplex, there was a memory shortage in the local daemon. *Action:* Increase the region size for the daemon. If the problem persists, contact your Software AG technical support representative. **Note:** This subcode is not subject to COR Debug.
208	When running Multi-system dynamic transaction routing (z/OS only) and attempting to move a facility across the Sysplex, there was a protocol error in the local daemon when attempting communications with a peer daemon. *Action:* Contact your Software AG technical support representative. **Note:** This subcode is not subject to COR Debug.
209	When running Multi-system dynamic transaction routing (z/OS only) and attempting to move a facility across the Sysplex, a peer daemon returned an error. *Action:* Contact your Software AG technical support representative. **Note:** This subcode is not subject to COR Debug.
210	When running Multi-system dynamic transaction routing (z/OS only) and attempting to move a facility across the Sysplex, there was an internal error with the facility size. *Action:* Contact your Software AG technical support representative. **Note:** This subcode is not subject to COR Debug.
211	When running Multi-system dynamic transaction routing (z/OS only) and attempting to move a facility across the Sysplex, the facility could not be moved into daemon managed shared memory in the local daemon due to a lack of space. *Action:* Refer to the daemon group member parameter Daemon latency/pulse services and increase the size of the dataspace. If the problem persists, contact your Software AG technical support representative. **Note:** This subcode is not subject to COR Debug.
212	When running Multi-system dynamic transaction routing (z/OS only) and attempting to move a facility across the Sysplex, there was an internal error writing to daemon managed shared memory. *Action:* Contact your Software AG technical support representative. **Note:** This subcode is not subject to COR Debug.

Subcode	Meaning
213	When running Multi-system dynamic transaction routing (z/OS only) and attempting to move a facility across the Sysplex, there was a protocol error in the local daemon when attempting to remove the facility from a peer daemon. *Action:* Contact your Software AG technical support representative. **Note:** This subcode is not subject to COR Debug.
214	When running Multi-system dynamic transaction routing (z/OS only) and attempting to move a facility across the Sysplex, a peer daemon returned an error when instructed to remove a facility. *Action:* Contact your Software AG technical support representative. **Note:** This subcode is not subject to COR Debug.

Open Systems

On open systems, one of the following Adabas System Coordinator subcodes may also be included with this response code:

Subcode	Meaning
1 (0x0001)	The standard Adabas or Entire Net-Work ADALNKX library could not be loaded. *Action:* Check that the ADALNKX parameter in the Initialisation File (cor.cfg) is set correctly and that the library exists.
2 (0x0002)	The standard Adabas or Entire Net-Work ADALNKX library could not be loaded. *Action:* Contact your Software AG technical support representative.
3 (0x0003)	The standard Adabas or Entire Net-Work ADALNKX library does not export all expected functions. *Action:* Check that the ADALNKX parameter in the Initialisation File refers to an ADALNKX library and not an ADALNK or ADALNK32 library.
4 (0x0004)	Adabas did not return the database architecture information in the ISN lower limit field when an OP command was issued to the Configuration File. *Action:* Contact your Software AG technical support representative.

Subcode	Meaning
5 (0x0005)	The path to the Initialisation File (cor.cfg) could not be determined. *Action:* Check the HKLM\SOFTWARE\Software AG\Adabas System Coordinator registry key and ensure the Path value is set correctly (Windows). Check that the $CORDIR and $CORVERS environment variables are set correctly (Unix).
6 (0x0006)	The ADALNKX parameter could not be read from the Initialization File (*cor.cfg*). *Action:* Check that the Initialization File exists and that the ADALNKX parameter is set correctly.
7 (0x0007)	The LFILE parameter could not be read from the Initialization File. *Action:* Check that the Initialization File (*cor.cfg*) exists and that the LFILE parameter is set correctly.
8 (0x0008)	An incompatible version of an Adabas add-on product is installed. *Action:* Contact your Software AG technical support representative.
9 (0x0009)	An incompatible version of an Adabas add-on product is installed. *Action:* Contact your Software AG technical support representative.
10 (0x000A)	The library for an Adabas add-on product could not be loaded. *Action:* Check that the Adabas add-on product is installed correctly.
11 (0x000B)	The library for an Adabas add-on product could not be unloaded. *Action:* Contact your Software AG technical support representative.
12 (0x000C)	The address or length of the format, record, search, value or ISN buffer appears to be invalid. *Action:* Check the buffer addresses passed to the adabas() function and the lengths specified for the buffers in the Adabas control block.

Subcode	Meaning
13 (0x000D)	The CORADC load module could not be fetched (Mainframe). *Action:* Check that $STEPLIB environment variable is correct and that the CORADC load module exists in the specified data set.
14 (0x000E)	Port range exhausted (there are not enough allocated to this computer). *Action:* Configure a larger port range for the Adabas System Coordinator Computer using System Management Hub.
15 (0x000F)	Port conflict (the allocated port is in use by another application). *Action:* Assign a different port to the Adabas System Coordinator daemon or change the port range for the Adabas System Coordinator computer using System Management Hub.
16 (0x0010)	Computer name could not be generated. *Action:* The Adabas System Coordinator Launch Control could not generate a unique computer name for the machine. Create an Adabas System Coordinator computer for this machine manually using System Management Hub.
17 (0x0011)	The FDT of the Configuration File is not compatible with Adabas System Coordinator. *Action:* Check that the database and file numbers are correct.
18 (0x0012)	The version of Adabas is not compatible with Adabas System Coordinator. *Action:* Contact your Software AG technical support representative.
19 (0x0013)	The SAGABS library could not be loaded. *Action:* Check that the SAGABS library is installed.
20 (0x0014)	The SAGABS library could not be unloaded. *Action:* Contact your Software AG technical support representative.
21 (0x0015)	The SAGABS library is not compatible with Adabas System Coordinator. *Action:* Contact your Software AG technical support representative.

Subcode	Meaning
22 (0x0016)	Port conflict (the allocated port is in use by another Adabas System Coordinator Group). *Action:* Assign a different Group Services port to the Adabas System Coordinator Computer using System Management Hub.
23 (0x0017)	Unable to spawn process (the command line parameters specified for the process are invalid). *Action:* Contact your Software AG technical support representative.
24 (0x0018)	Length of compressed record buffer length exceeds limit. *Action:* Contact your Software AG technical support representative.
25 (0x0019)	Length of compressed record buffer could not be determined. *Action:* Contact your Software AG technical support representative.
26 (0x001A)	Product not installed or not configured correctly. *Action:* Check that the Adabas add-on product is installed correctly.
27 (0x001B)	Configuration file version does not match the running version. *Action:* Contact your Software AG technical support representative.
28 (0x001C)	Configuration file layout is not as expected for a configuration file. *Action:* Contact your Software AG technical support representative.
29 (0x001D)	The installed Adabas version does not correctly process LF 'S' commands (Adabas 6.1.9 or earlier). *Action:* Contact your Software AG technical support representative.
30 (0x001E)	The installed Adabas version does not support LF 'I' commands (unzapped Adabas 8.2.2 or earlier). *Action:* Contact your Software AG technical support representative.
31 (0x001F)	Migration of the Configuration File was unsuccessful. *Action:* Check the output of the migration process for erros. If the reason for an unsuccessful migration cannot be

Subcode	Meaning
	determined, contact your Software AG technical support representative.
52 (0x0034)	Exception reading/writing pointer. *Action:* Contact your Software AG technical support representative.
0000A001-FFFFA001	A TCP/IP error occurred. *Action:* The left-hand side of the subcode contains the operating system error code.
0000A002-FFFFA002	A DNS error occurred. *Action:* The left-hand side of the subcode contains the operating system error code.

Response 102

Origin Mainframe systems only

Explanation Space calculation error.

Action Retry the open operation.

Response 105

Origin Mainframe systems only

Explanation An ADAECS error occurred. Please check for an accompanying ADAN7A message with further information.

Response 106

Origin Mainframe systems only

Explanation The prefetch table record buffer specified in the UDB is too small.

Response 107

Origin Mainframe systems only

Explanation Either a GETMAIN error occurred or there was insufficient space when performing prefetch. Prefetch is switched off.

Response 109

Origin Mainframe systems only

Explanation The specified command ID is already active on another database for this user.

Response 110

Origin Mainframe systems only

Explanation The command ID pool is full.

Action Increase the size of either or both the ADARUN NQCID or NU parameters.

Response 113

Origin Mainframe and open systems

Explanation The specified ISN was invalid for one of the following reasons:

- An HI command was issued with ISN less than MINISN or with an ISN equal to zero (0).
- An N2 command was issued with ISN equal to 0 or larger than the MAXISN in effect for the file.
- An N2 command was issued and the specified ISN was assigned to another record in the file.
- An A1, L1/L4, or S1/S2/S4 (with FB) command was issued for a nonexistent ISN, or an E1 command for a nonexistent ISN other than zero.
- An L3/L6 command found an ISN in the index which did not exist in the address converter.
- An N1/N2 command tried to access a file protected by security-by-value, but the command user is not authorized to access the file.
- A read or update command tried to access a multiclient file's record using either a blank or incorrect-length owner ID, or an owner ID that does not apply to the record.
- An RI command was issued for a record that has been updated earlier in the same transaction. The record cannot be released from hold status prior to transaction end. Subcode 5 is issued for this reason.
- Subcode 19 is given when a base file record is not found in the address converter (AC). At the end of a LOB update in the LOBfile, the associated base file record no longer existed.
- Subcode 249 is given only when Adabas Vista is in use. Refer to the Adabas Vista documentation for more information.

Open Systems

On open systems, the following subcodes may occur:

Subcode	Meaning
249 (0x00F9)	An invalid ISN was detected by Adabas Vista (open systems). The ISN specified for an `E1, HI` or `L1` command is not consistent with the definitions for the partitioned file. *`Action:`* Review the program logic

Action Correct the ISN problem and try again.

Response 114

Origin Mainframe and open systems

Explanation A refresh file function using the E1 command was issued (E1 with ISN=0), and one of the following situations has occurred.

The meaning of this response code varies, depending on whether you are using Adabas on mainframe systems or Adabas on open systems.

Mainframe Systems

One of the following subcodes may be present:

Subcode	Description
1	A file refresh is not permitted for the file because either ■ the file parameter setting is PGMREFRESH=NO (can be checked with ADAREP or via Adabas Online Services (AOS) Display File) ■ or the command ID field (ACBCID or ACBXCID) is not all blanks.
2	The user has not completed transactions to the file. Updates have been performed or records are still in hold, but the user has not issued an ET or BT command to commit or back out the updates.
3	Other users are accessing or updating the file. This is determined by the user access or update counts available internally to Adabas.
4	The file is a multiclient file and the user is not a superuser.

Open Systems

One of the following situations has occurred:

- PGM_REFRESH is not specified for the file.
- The user session is not at ET status.

Action The method of resolving the error varies, depending on whether you are using Adabas on mainframe systems or Adabas on open systems.

Mainframe Systems

If you forgot to specify the ISN for the E1 command, the CID setting is incorrect, the command was not issued at ET status or the user is no superuser: correct your program accordingly.

If other users are accessing or updating the file STOP these users.

If PGMREFRESH=YES was not specified for the file in question, specify PGMREFRESH=YES for the file with ADADBS or Adabas Online Services (AOS) or load the file with the appropiate ADALOD parameter.

Open Systems

If you forgot to specify the ISN for the E1 command, or the command was not issued at ET status, correct your program. If PGM_REFRESH was not specified for the file in question, specify PGM_REFRESH for the file with ADADBM.

Response 123

Origin Mainframe systems only

Explanation An error was reported by the Adabas cluster messaging service on the sender's side. The message was not sent. One of the following subcodes may be present:

Subcode	Meaning
4	No valid destination(s)
8	Too many destinations
12	Invalid message type
16	Invalid environment
20	Send buffer length exceeded
24	Receive buffer length exceeded
28	No replies or acknowledgment(s) before the message timed out. For more information about the timeout value, refer to descriptions of the ADARUN MXMSG parameter.
32	Unable to allocate AXMCB
36	Timed out on originating system
40	Timed out on destination system
44	Canceled on destination system
48	Receive error on destination system
52	Unable to allocate buffer
56	Too many buffer elements
80	Messaging is inactive
96	Terminate member unsuccessful
128	Other Trans-port service error

Action If you are unable to resolve the problem, contact your Software AG technical support representative.

Response 124

Origin Mainframe systems only

Explanation An error was reported by the Adabas cluster messaging service on the receiver's side. The message was sent. One of the subcodes described for response code 123 (ADARSP123) may be present.

Action If you are unable to resolve the problem, contact your Software AG technical support representative.

Response 125

Origin Mainframe systems only

Explanation An internal error occurred when one cluster nucleus attempted to issue an internucleus command to one or more of the other cluster nuclei. This condition usually leads to abnormal termination.

Action Contact your Software AG technical support representative.

Response 126

Origin Mainframe systems only

Explanation A messaging error occurred during internucleus communication:

- The nucleus did not respond within the allotted time (see the ADARUN MXMSG parameter); or
- One or more problems occurred in what could be a broadcast; that is, a communication with multiple targets. In this case, each individual ACB contains either response code 0 (ADARSP000) or 123 (ADARSP123) or 124 (ADARSP124).

Action If you are unable to resolve the problem, contact your Software AG technical support representative.

Response 129

Origin Mainframe systems only

Explanation In an Adabas cluster environment, the user attempted to perform an Adabas function that is not yet supported by Adabas cluster nuclei.

Response 130

Origin Mainframe systems only

Explanation An error identified by one of the following subcodes occurred in an Adabas cluster environment:

Subcode	Description
1	A user table entry (UTE/PLXUSER) was not found in the MPM 8 call. This may indicate that a command was directed to an Adabas Cluster Services or Adabas Parallel Services nucleus ID (NUCID), not the DBID.
2	A user table entry (UTE/PLXUSER) was not found in the MPM 12 call.
9	The associated PLXUSER(UTE) was unsuitable at command initiation. One possibility is that the UQE of the user was deleted between the time the user's command was routed to one nucleus in the cluster and the time that nucleus selected the command for processing. Another possibility is that the PLXUSER and UQE UID string did not match because the PLXUSER may have been released and possibly reassigned to another user.
10	The associated PLXUSER(UTE) was unsuitable at command completion. The PLXUSER and UQE UID string did not match because the PLXUSER may have been released and possibly reassigned to another user.
11	No Work data set entry in active PPT block (bad PPT block).
12	Invalid internal NUCID (internal error) - accompanied by message ADAX3E.
13	Invalid external NUCID (bad PPT block, internal error) - accompanied by message ADAX3F.
14	Work data set already open for same internal NUCID, other external NUCID - accompanied by message ADAX3G.
15	Work data set already open for same external NUCID, other internal NUCID - accompanied by message ADAX3H.
16	Different Work data set already open for same peer nucleus - accompanied by message ADAX37.
17	Work data set of peer nucleus could not be opened - accompanied by message ADAX32.
18	I/O error when trying to read Work data set of peer nucleus - accompanied by message ADAX3C.
19	Unexpected (invalid) data in Work data set of peer nucleus - accompanied by message ADAX3D.
20	Mismatching DBID in Work data set.
21	Mismatching Adabas version indicator in Work data set.
22	Work data set written by non-cluster nucleus.
23	Partially written block in Work data set protection data extension area - accompanied by message ADAX5H.

Action For subcode 1, correct the application program attempting to issue commands using the NUCID. If that is not the case, or for other subcodes, contact your Software AG technical support representative for assistance.

Response 131

Origin Mainframe systems only

Explanation In most cases this response code will be given to the user in the URBRRSP field of the URBR block with the subcode in the URBRSUB field. The subcode appears either in the low-order (rightmost) two bytes of the additions 2 field or in the URBRSUB field. It indicates the specific cause and action for this response code. The following are the subcodes and their meanings:

Subcode	Meaning
1	The combination of URBD plus payload data does not fit in the output buffer. *Action:* Change the subscription definition to make the record shorter.
2	The subscription user exit set a value in URBRERRC. *Action:* Check the URBRERRC field and correct the error if appropriate.
3	There is insufficient space in the nucleus replication pool. In other words, the value specified by `LRPL` has been exceeded. *Action:* Increase the LRPL size of the nucleus and try again.
4	There is insufficient space in the Event Replicator Server replication pool. In other words, the value specified by `LRPL` has been exceeded. *Action:* Increase the size of the LRPL parameter and try again.
5	The subscription user exit modified data length (URBDLEND) to an invalid value. *Action:* Check the subscription user exit.
6	The response destination (URBIRNAM) specified in a client request is undefined or not usable for sending the response. *Action:* Correct the status request to specify the name of an existing destination definition.
7	Both the subscription (URBISNAM) and the destination (URBIDNAM) to be specified in a status request are missing. At least one of them must be specified. *Action:* Correct the status request.
8	The subscription (URBISNAM) specified in a status request is undefined. *Action:* Correct the status request.

Subcode	Meaning
9	The initial state name specified was not found. *Action:* Correct the initial-state request.
10	The destination for response in URBI following URBI 1 is not equal to those of URBI 1. *Action:* Correct the initial-state request.
11	The initial state name in URBI following URBI 1 is not equal to that of URBI 1. *Action:* Correct the initial-state request.
12	The combination of DBID and file specified in the initial-state request is not found in the initial-state definition. *Action:* Correct the initial-state request.
14	Not all combinations of DBID and file are specified in the initial-state request. A URBI must be sent for each DBID/file specified in the initial-state definition. *Action:* Correct the initial-state request.
15	Field URBILEND is invalid. *Action:* Correct the initial-state request.
16	The specified ISNLIST is invalid. *Action:* Correct the initial-state request.
17	The initial-state process has been stopped by an operator request. *Action:* No action is required.
18	Different request tokens have been specified in different URBI elements in the same message. *Action:* Correct the initial-state request.
19	Selection data is not allowed for an initial-state definition for all records or for destination open/close client requests. *Action:* Correct the initial-state or destination open/close client request.
20	Invalid input data for decompression was found during the subscription phase. *Action:* Check the index of the replicated file.
22	The file/DBID supplied for the initial-state process is deactivated for replication. *Action:* Check the cause of deactivation and repeat the request after reactivation.

Subcode	Meaning
23	Invalid UES parameter in URBI . URBIARC, URBIACOD, and URBIWCOD must contain invalid values and must not be all blanks. *Action:* Verify that the URBIARC, URBIACOD, and URBIWCOD elements are not all blanks.
24	Invalid UES parameter in URBI. URBIARC, URBIACOD and URBIWCOD must be zero for input requests where encoding and architecture is not evaluated -- that is, for status requests, destination open/close requests, "initial state all records" or "initial state ISN list" requests. *Action:* The URBIARC, URBIACOD, and URBIWCOD elements must be zeros for "initial state all records" requests, "initial state ISN list" requests, status requests, or destination open/close requests. Verify that this is the case.
25	The unused URBIRES1 and URBIRES2 fields must contain binary zeros for all requests. *Action:* Verify that these fields contain binary zeros.
26	The destination (URBIDNAM) specified in a client request is either undefined or not usable for sending the response. *Action:* Correct the client request.
27	No active destinations for status request. *Action:* No action is required.
28	An initial-state request was issued to an Event Replicator Server address space that was terminating as a result of an ADAEND or HALT command. An initial-state request may only be issued when the Event Replicator Server is active. *Action:* Reissue the initial-state request when the Event Replicator Server has been restarted.
30	Unknown response destination name in URBIRNAM for a prior-transaction request. *Action:* Correct the prior-transaction request.
31	Unknown destination name in URBIDNAM for a prior-transaction request. *Action:* Correct the prior-transaction request.
32	Unknown or omitted subscription name in URBISNAM for a prior-transaction request. *Action:* Correct the prior-transaction request.

Subcode	Meaning
33	Destination in URBIDNAM is not related to subscription in URBISNAM for a prior-transaction request. *Action:* Correct the prior-transaction request.
34	Subscription in URBISNAM has no resend buffer defined for a prior-transaction request. *Action:* Correct the prior-transaction request.
35	Transaction in URBITSNR for subscription in URBISNAM was not found in the resend buffer. The transaction may have been overwritten in the circular resend buffer. *Action:* Check the source of the transaction number.
36	The subscription in URBISNAM is not active. *Action:* No action is required.
37	An invalid transaction was found in the resend buffer. This is an internal error. *Action:* Notify your Software AG technical support representative.
38	There are no active destinations for a prior-transaction request. *Action:* No action is required.
39	URBILEND must be zero for prior-transaction requests. *Action:* Correct the prior-transaction request.
40	URBIDBID and URBIFNR may not be specified for this type of client request. *Action:* Correct the client request.
41	URBIINAM may not be specified for prior-transaction requests. *Action:* Correct the prior-transaction request.
42	UES parameters URBIARC, URBIACOD and URBIWCOD may not be specified for prior-transaction requests. *Action:* Correct the prior-transaction request.
43	Reserved fields URBIRES1 and URBIRES2 must be zero for prior-transaction requests. *Action:* Correct the prior-transaction request.
44	Number of active concurrent initial-state requests exceeded IMAXREQ. *Action:* Increase the IMAXREQ setting or reduce the number of active concurrent initial-state requests.

Subcode	Meaning
45	Input request URBH eyecatcher is invalid. *Action:* Correct the input information and try again. For more information, read *Event Replicator Client Requests* in the *Event Replicator for Adabas Application Programmer's Reference* .
46	Input request URBHLEN is invalid. *Action:* Correct the input information and try again. For more information, read *Event Replicator Client Requests* in the *Event Replicator for Adabas Application Programmer's Reference* .
47	Input request URBHBORD is invalid. *Action:* Correct the input information and try again. For more information, read *Event Replicator Client Requests* in the *Event Replicator for Adabas Application Programmer's Reference* .
48	Input request URBHVERS is invalid. *Action:* Correct the input information and try again. For more information, read *Event Replicator Client Requests* in the *Event Replicator for Adabas Application Programmer's Reference* .
49	Input request message truncated. *Action:* Correct the input information and try again. For more information, read *Event Replicator Client Requests* in the *Event Replicator for Adabas Application Programmer's Reference* .
50	Input request URBHLENT is invalid. *Action:* Correct the input information and try again. For more information, read *Event Replicator Client Requests* in the *Event Replicator for Adabas Application Programmer's Reference* .
51	Input request URBILENH is invalid. *Action:* Correct the input information and try again. For more information, read *Event Replicator Client Requests* in the *Event Replicator for Adabas Application Programmer's Reference* .
52	Input request URBILEND is invalid. *Action:* Correct the input information and try again. For more information, read *Event Replicator Client Requests* in the *Event Replicator for Adabas Application Programmer's Reference* .
53	Input request URBILEN is invalid. *Action:* Correct the input information and try again. For more information, read *Event Replicator Client Requests* in the *Event Replicator for Adabas Application Programmer's Reference* .

Subcode	Meaning
54	Input request reserved area is not zero. *Action:* Correct the input information and try again. For more information, read *Event Replicator Client Requests* in the *Event Replicator for Adabas Application Programmer's Reference* .
55	Input request more than one status received. *Action:* Correct the input information and try again. For more information, read *Event Replicator Client Requests* in the *Event Replicator for Adabas Application Programmer's Reference* .
56	Input request invalid URBI request received. *Action:* Correct the input information and try again. For more information, read *Event Replicator Client Requests* in the *Event Replicator for Adabas Application Programmer's Reference* .
57	Input request different interleaved requests received. *Action:* Verify that you are submitting only one kind of request to the Event Replicator Server. Only one type can be submitted at a time (for example, you cannot request initial-state processing and transaction status information requests in the same message). Correct the input information and try again. For more information, read *Event Replicator Client Requests* in *Event Replicator for Adabas Application Programmer's Reference* .
58	Invalid destination for response. *Action:* Correct the input information and try again. For more information, read *Event Replicator Client Requests* in the *Event Replicator for Adabas Application Programmer's Reference* .
59	A replay request was issued for a database not defined to the Event Replicator Server. *Action:* Correct the DBID in the replay request or define the database to the Event Replicator Server.
60	Invalid replay token. The replay token is not defined or is outdated. *Action:* Specify a valid replay token.
61	Invalid request sent to Event Replicator Server. RBL is insufficient, no FB provided on Init handshake or other such errors. *Action:* Notify your Software AG technical support representative.
62	After an Adabas failure and session autorestart, replication data was recovered for which a matching FDT was no longer available. The FDT had been changed or deleted by a utility operation. Adabas suppressed the record images of the replicated records, because without a matching FDT, the Event Replicator Server could not process them.

Subcode	Meaning
	Action: Use application-specific means to bring the replicated data in sync again, if necessary.
63	The file specified in a C5 command with R-option is not replicated. *Action:* Specify the file number of a replicated file.
64	The filter defines a comparison between two field types for which a comparison is invalid. *Action:* Correct the filter definition.
65	The filter refers to a field that is not defined in the internal format buffer. *Action:* Correct the filter definition or define the field in the database.
66	The filter defines a comparison against a field that is not selectable as it has no type (for example, a superdescriptor). *Action:* Correct the filter definition.
67	The filter uses values in an FLIST specification that are invalid or out of range. *Action:* Correct the filter definition.
69	Replay for same DBID/FNR already running.
71	Date/time format or value incorrect for replay. *Action:* Check the syntax of the specified date and time values. Do not specify future date and time values.
72	Incorrect replay parameters. *Action:* Check and correct the specified replay parameters.
73	A subscription involved in the replay was inactive at the beginning of replay processing or was deactivated while the replay was running. *Action:* Reactivate the deactivated subscription and rerun the replay process for the subscription.
74	A destination involved in the replay was inactive at the beginning of replay processing or was deactivated while the replay was running. *Action:* Reactivate the deactivated destination and rerun the replay process for the destination.
75	A replay destination that was defined without SLOG was closed at the beginning of replay processing or while the replay was running. *Action:* Reopen the closed destination and rerun the replay process for the destination.

Subcode	Meaning
76	ADARPL terminated abnormally. *Action:* Investigate the cause of the error, correct it, and run a new replay job.
77	Invalid replay status transition. Events that change the status of a replay process occurred in an unexpected order. *Action:* Notify your Software AG technical support representative.
78	New transactions from Adabas could not be kept on hold during a replay in synchronized mode. *Action:* Run a new replay process involving the same subscriptions and destinations as the previous replay process to recover the replication data that Adabas produced while the first replay was running.
79	A replay process was canceled by a user (RPLCLEANUP operator command). *Action:* If appropriate, run another replay job with corrected parameters.
80	A timeout occurred while the Event Replicator Server was waiting for the end of a synchronization process after reactivating replication for a file in Adabas. The synchronization process ends when all transactions have finished that had updated the file before it was reactivated. *Action:* Wait until the Event Replicator Server reports the activation of the file (ADAF2L message). Then run a new replay job.
81	A utility other than ADARPL specified a replay token when connecting to the Event Replicator Server. *Action:* Notify your Software AG technical support representative.
82	The Event Replicator Server is not connected to Adabas at the start of a replay process with the TOKEN parameter. *Action:* Start Adabas and let it connect to the Event Replicator Server. When running a replay with the TOKEN parameter, Adabas must be active.
83	Neither a subscription nor a destination was specified in a replay request. *Action:* Specify at least one subscription or destination.
84	A replay in replay-only mode was requested, but replication data from Adabas would flow through an active subscription-destination pair involved in the replay. For a replay in replay-only mode, some subscriptions and destinations must be inactive such that no data from Adabas can flow through the same subscription-destination pairs as the replay data from ADARPL. *Action:* Change the replay parameters or the activation status of the subscriptions or destinations involved in the replay.

Subcode	Meaning
85	A file involved in the replay was inactive at the beginning of the replay or deactivated while the replay was running. *Action:* Reactivate the deactivated file and rerun the replay process for the subscriptions involved in the replay that get data from the file.
86	Invalid format buffer was specified for destination-type Adabas update commands. *Action:* Correct the format buffer.
87	An unexpected message sequence number was encountered. *Action:* Contact your Software AG support representative.
88	An unrecognized eye-catcher was encountered in control block following the URBH. *Action:* Contact your Software AG support representative.
89	The same subscription name was specified more than once for an Adabas automated replay (defined using the Adabas Event Replicator Subsystem). *Action:* Verify that a subscription is specified only once in an automated replay, and try again.
90	The same destination name was specified more than once for an Adabas automated replay (defined using the Adabas Event Replicator Subsystem). *Action:* Verify that a destination is specified only once in an automated replay, and try again.
91	The replay start date and time were not supplied for an automated replay (defined using the Adabas Event Replicator Subsystem) or for multiple destination open/close client requests. *Action:* Verify that a destination is specified only once in an automated replay or in multiple destination open/close client requests and try again.
92	The timeout parameter specified for an automated replay was too high. *Action:* Reduce the timeout parameter value and try again.
93	PLOG information was not recorded in the Event Replicator Server system file. *Action:* Contact your Software AG support representative.
94	The AI/BI format buffer was used also for the key. An attempt was made to decompress a key value, but the related format buffer is for data storage and not for a key. *Action:* Contact your Software AG support representative.

Subcode	Meaning
95	An attempt to set user/Event Replicator Server encoding 01-RPEQU * failed. This might occur if you are using enhanced filtering logic and UES SACODE/SWCODE/SARC values are set for a subscription. *Action:* Contact your Software AG support representative.
96	The Adabas nucleus that was the target of an initial-state request returned response code 148 (ADARSP148), indicating it is not available. *Action:* Start the targeted Adabas nucleus and retry the initial-state request.
97	A format buffer was specified which contains a LOB field, which is not supported. *Action:* Correct the format buffer.
99	The subscription name (URBISNAM) specified in the destination open/close client request contains a value other than spaces. *Action:* Correct the destination open/close client request by setting this field to spaces.
100	The transaction sequence number (URBITSNR) specified in a destination open/close client request contains a value other than binary zeroes. *Action:* Correct the destination open/close client request by setting this field to binary zeroes.
101	The destination open/close request failed on some tasks. *Action:* Investigate the cause of the error.
102	The destination open/close request failed. *Action:* Investigate the cause of the error.
103	The destination open/close request was not performed because the destination's status was already in the state being requested. In other words, the destination was already opened or closed. *Action:* No action is required.
104	Begin byte in field filter is longer than the field length. *Action:* Adjust the specifications for the beginning byte or length and try again.
105	Begin byte plus the portion length in the field filter is longer than the field length. *Action:* Adust the specifications for the beginning byte or the portion length and try again.

Subcode	Meaning
106	Begin byte or length not supported for field with format U, P, F, G, or W. *Action:* Specifying a beginning byte or length is only supported for alphanumeric and binary fields. Change the field on which you are working or abandon this attempt.
107	Length value invalid for field. *Action:* Adjust the length specification and try again.
108	Input request URBI eyecatcher is invalid. *Action:*Correct the input information and try again. For more information, read *Event Replicator Client Requests* in the *Event Replicator for Adabas Application Programmer's Reference*.
109	An Adabas security (ADASCR) function has been invalidly replicated to a subscription file defined with SFSECURITYFILE=NO. *Action:* Ensure the subscription file definition used for the security file is defined with SFSECURITYFILE=YES.
110	An invalid Adabas security (ADASCR) pseudo transaction has been replicated to the Event Replicator Server. *Action:* Contact your Software AG technical support representative for assistance.
111	A replicated record (e.g., delete, insert, refresh, or update) has been invalidly replicated to a subscription file defined with SFSECURITYFILE=YES. *Action:* Ensure that the subscription file definitions for a file, other than a security file, is defined with SFSECURITYFILE=NO.
112	A request to convert an update to a delete failed because no before image was provided.
113	Insufficient WORK pool space. *Action:* Increase the value of the ADARUN parameter `LWP`.
114	During a recovery process, segments of a spanned record arrived in the wrong sequence.
115	`FB='C'` was requested when the length of the compressed record was greater than 65,535.
116	Initial state with SELCRIT is not supported for files with spanned DS support.
117	Cannot decompress ciphered records. No Cipher code is returned from ADASAF.

Subcode	Meaning
118	Replay-Only Replay is not allowed if one or more destinations involved are closed. *Action:* Ensure that the destination(s) selected for replay-only mode replay processing are not closed.
119	A GETMAIN request failed in the REPTOR.
120	The FDT length is invalid.
121	The input compressed record is too long.

Action Perform the action provided for the appropriate subcode in the subcode table.

Response 132

Origin Mainframe and open system

Explanation The exact meaning of this response code varies, depending on whether you are using Adabas on mainframe systems or Adabas on open systems.

Mainframe Systems

This response code indicates that an error occurred while Adabas was reading or updating a *LOB file*. The subcode indicates the kind of error.

If the subcode is less than 256, it is the same as the original response code that occurred during LOB file processing. The most likely subcodes are listed in the table below. For subcodes not listed, see the description of the Adabas response code with the same value.

If the subcode is greater than 256, it signals an error condition unique to the processing of LOB files. These subcodes are listed in the table below.

Subcode	Description
8	A LOB file operation was aborted due to a pending backout of the user's command or transaction. One reason for this backout may be that the user's transaction occupied too much space on the protection area on the Work data set (see response code 9 (ADARSP009), subcode 15).
17	The LOB file is not loaded.
48	The LOB file is locked for exclusive read or update by another user.
65	An internal error in the work pool space calculation occurred for LOB file processing.
113	A LOB file segment record was not found in the Address Converter element referred to by the LOB file index. Either the LOB file is physically inconsistent or an illegal concurrent LOB file update occurred during the LOB file read operation.

Subcode	Description
145	An attempt failed to put a LOB file segment record on hold for a user, because it was already held by another user. This subcode indicates illegal update contention for the same large object field value. The base file-LOB file pair is possibly inconsistent.
165	The LOB file descriptor is not found in the index; The LOB file index is bad.
172	An ISN in the LOB file index is bad. The LOB file may be physically inconsistent.
175	The descriptor value in a LOB file segment record differs from the descriptor value in the LOB file index. Either the LOB file is physically inconsistent or an illegal concurrent LOB file update occurred during the LOB file read operation.
177	A LOB file segment record was not found in the Data Storage block referred to by the Address Converter. Either the LOB file is physically inconsistent or an illegal concurrent LOB file update occurred during the LOB read operation.
257	An error in the base file-LOB file linkage exists; a file with LB fields is not really the *base file* of the *LOB group*.
258	An error in the base file-LOB file linkage exists; the file linked to the base file of a LOB group is not really a LOB file.
259	An error in the base file-LOB file linkage exists; the LOB file linked to a base file of a LOB group refers back to a different base file (or none at all).
260	An error in the base file-LOB file linkage exists; either no LOB file was linked to a base file or the LOB file number is invalid.
261	The LOB file has been left in an inconsistent state by an aborted utility execution.
262	An LB field length element specification error occurred in the format buffer (`'xxL,4,B'` was expected).
263	An invalid LOB file segment descriptor was encountered. The set of LOB file segment records associated with one LB field value is inconsistent. Either the LOB file is bad or an illegal concurrent LOB file update occurred during the LOB file read operation.
264	An invalid LOB file segment record was encountered. The contents of a LOB file record are inconsistent. The LOB file is bad.
265	The length of an LB field value in the LOB file differs from the length stored in the associated base file record. Either the base file and the LOB file are out-of-sync or an illegal concurrent LOB file update occurred during the LOB file read operation.
266	A bad LB field value reference was encountered in a base file record. The base file is bad.
267	An LB field value referred to in a base file record is not present in the LOB file. Probably, the base file and the LOB file are out-of-sync.

Subcode	Description
268	Internal LOB update error. At the end of a LOB update in the LOB file, the LOB value reference or placeholder was not found in the associated base file record where it was expected. Possibly, the base file record was changed in parallel.
270	Internal LOB update error. At the end of a LOB update in the LOB file, the base record was not in exclusive hold status anymore.
297	A planned feature for large object (LB) fields (for example, character code conversion of LB field values) is not yet supported.
298	Too many (more than 32,767) LB field occurrences were specified in the format buffer.
299	An internal error occurred due to LOB file processing.

Open Systems

LOB data processing may fail because of concurrent updates. If a new attempt to process the LOB data also fails, this response code is returned. The subcode (field ACBXERRC in the ACBX) provides more information:

Subcode	Description
297	A planned feature for large object (LB) fields (for example, character code conversion of LB field values) is not yet supported.
300	The referential integrity and uniqueness checks done by subtransactions are currently not compatible with commands that modify LOB values.

Action

The method of resolving the error varies, depending on whether you are using Adabas on mainframe systems or Adabas on open systems.

Mainframe Systems

Resolve the problem described in the subcode list in the explanation.

Open Systems

If one of the subcodes above occurs, you must change the program that is making the Adabas calls.

If the subcode (field ACBXERRC in the ACBX) is not one of the subcodes mentioned above, and if the response code 132 is reproducible even though the accessed LOB fields are not being updated, contact your Software AG technical support representative.

Response 133

Origin Mainframe systems only

Explanation An error was detected when an attempt was made to replicate a compressed record. The subcode identifies the kind of error.

Subcode	Description
1	The function is not permitted for this type of file. The file is a LOB-file.
2	The compressed input record length is invalid .
11	The record structure is invalid.
12	An invalid elementary empty field was encountered. The structure does not agree with the FDT definition.
13	An invalid multiple-field count was encountered.
14	An invalid periodic group count was encountered.
15	An invalid structure of an elementary field was encountered.
65	A space calculation error occurred.

Response 134

Origin Mainframe systems only

Explanation An error was detected when creating system fields. The subcode identifies the kind of error.

Subcode	Description
1	An invalid update parameter was encountered (logic error).
2	The field is not a system field.
4	The file does not support a setting of MUPEX=2 (number of MU occurrences greater than 191.

Response 136

Origin Mainframe systems only

Explanation This response code is used for communication with Adabas utilities and Adabas Audit Administration (SYSALAA) or Adabas Online System (AOS). The system returns this error because the requested function could not be performed on the Adabas system and its files, or because an error occurred in a SYSALAA/AOS or utility function.

Action For SYSALAA/AOS, a subcode is displayed in the error message or a descriptive message indicates the error that occurred. For utility functions, the subcodes may be described within the message text or a descriptive message indicates the error that occurred. If you do not understand the action to take, note the subcode and the function that caused the response code and call your Software AG technical support representative for assistance.

Response 144

Origin Mainframe and open systems

Explanation One of the following occurred:

- The ISN specified with an update (A1) command was not in hold status for the user and command option H was not specified.
- An ET or BT command specifying the M (multifetch) option specified an ISN in the ISN buffer that is not in hold status for the user. All currently held ISNs are released from hold status.

  In this case on open systems, the first 2 bytes of the Additions 2 field (in binary format) contain the offset of that ISN in the ISN buffer.

Action Put the ISN in hold status before using the A1 command or the multifetch ET or BT commands.

If Adabas Transaction Manager is in use, verify that the setting for the Transaction Model parameter is appropriate for the program that was executing and is also appropriate for the runtime environment in use.

Response 145

Origin Mainframe and open system

Explanation The exact meaning of this response code varies, depending on whether you are using Adabas on mainframe systems or Adabas on open systems.

Mainframe Systems

On mainframe systems, one of the following situations occurred:

- An N1/N2 command was issued, but no hold queue entry was available.
- A command was issued with the return option specified that attempted to hold an ISN already in the hold queue for another user. The command is not placed in wait status.

Use the subcode associated with this response code to further clarify why this response occurred.

Subcode	Meaning
0	N2 command for an existing ISN was issued.
1	Hold queue space problem detected. The user is the only active user and is running with the -R option.
2	The ISN was held by someone else. The read request is running with the -R option.
8	The hold status of a record could not be upgraded from shared to exclusive because another user was already waiting to do the same. The two users became deadlocked.

Subcode	Meaning
9	Two or more users became deadlocked while holding ISNs and attempting to put more ISNs in hold status.

Open Systems

On open systems, one of the following situations occurred:

- An attempt was made to insert a record using an N2 command with an ISN that is in hold status.
- An attempt was made to hold an ISN which was in hold status for another user and the R option is specified. In this case, the Additions 2 field contains the binary value 0;
- Hold queue overflow. In this case, the Additions 2 field contains a value not equal to 0.

Note: This hold queue overflow error can only occur with Adabas versions < 5.1.

Response 146

Origin Mainframe and open systems

Explanation The exact meaning of this response code varies, depending on whether you are using Adabas on mainframe systems or Adabas on open systems.

Mainframe Systems

An invalid buffer length was detected by the Adabas interface routine. If the command uses a classic ACB, the buffer is larger than 32,767. If the command uses an ACBX, the buffer is greater than 2,147,483,647, or the send length in the ABD is greater than the buffer length. The subcode identifies the buffer type:

Subcode	Buffer Type
1	Format buffer
2	Record buffer
3	Search buffer
4	Value buffer
5	ISN buffer
6	User information buffer
7	Performance buffer
8	Multifetch buffer

Open Systems

An invalid buffer length was detected by the Adabas interface routine, in an MC call, or one of the following errors occurred for a multifetch command:

- the buffer header was invalid (both offsets are set)
- at least one ISN buffer offset was not divisible by 4
- the start offset was outside the multicall buffer range
- the record buffer was not large enough to contain all subcommand control blocks.

The value in the Additions 2 field identifies the buffer: the first 2 bytes contain the buffer number in binary format, the last two bytes contain the buffer name, as shown in the following table:

Bytes 1-2	Bytes 3-4
1	FB (format buffer)
2	RB (record buffer)
3	SB (search buffer)
4	VB (value buffer)
5	IB (ISN buffer)

Action Correct the buffer length and try again.

Response 147

Origin Mainframe and open systems

Explanation The exact meaning of this response code varies, depending on whether you are using Adabas on mainframe systems or Adabas on open systems.

Mainframe Systems

The ISN was invalid. The ISN transformation resulted in a negative ISN or an ISN greater than the maximum ISN permitted for the file.

Open Systems

A user buffer is not accessible by the Adabas interface routine.

Action The method of resolving the error varies, depending on whether you are using Adabas on mainframe systems or Adabas on open systems.

Mainframe Systems

Open Systems

Check whether the control block, format buffer, value buffer, record buffer and ISN buffer have valid addresses and lengths. Check whether the control block, ISN buffer and record buffer are write-protected.

Response 148

Origin Mainframe and open systems

Explanation The Adabas nucleus was either not active or not accessible (a call could not be sent to the Adabas nucleus when the command was issued). In an ACB, refer to the hexadecimal subcode that appears in the low-order (rightmost) two bytes of the Additions 2 field; in an ACBX, refer to the binary subcode that appears in the Error Subcode (ACBXERRC) field.

Note: If you are running with Entire Net-Work, the leftmost two bytes of the Additions 2 field (in the ACB) or the ACBXERRC field (in the ACBX) may contain the ID of the Entire Net-Work node that issued this response code.

The following are the decimal equivalents of the subcodes and their meanings:

Subcode	Occurrence Location	Description	Action
0	open systems	No active database server was found, either local or remote.	Start the nucleus and reissue the command.
1	mainframe systems	Exclusive database control requirement conflicts with read-only nucleus status.	Remove the READONLY=YES parameter setting for the nucleus and restart it.
2	mainframe systems	A nonprivileged call was made to the nucleus while it was in utility-only (UTI) mode.	Remove the UTIONLY=YES parameter setting for the nucleus and restart it.
3	mainframe and open systems	The nucleus is performing shutdown processing (an ADAEND operation) and will not accept new users or new transactions. Either a new user is attempting to begin operation or an existing user in ET status is trying to continue operation.	Wait for the nucleus to shut down, restart it, and reissue the command.
4	mainframe systems	A utility with exclusive database control is running.	Either stop the utility or wait for its processing to complete (this is preferred) and try again.
5	mainframe systems	A single-user nucleus could not start operation due to an error that could not be corrected.	Verify that single-user mode has been set up correctly and restart the nucleus.
8	mainframe systems	A user is performing a logical ADALNK call. The IDT for the call has not been allocated.	On BS2000 systems, check the setting of the parameter accessed by the link name DDLNKPAR or DDCARD, or in the macro B2CONFIG

Subcode	Occurrence Location	Description	Action
			of the module SSFB2C. Also check the IDTNAME parameter of the database to be accessed.
21	open systems	Entire Net-Work access communication has failed. The first two bytes of the Additions 2 field contain an error number.	Refer to your Entire Net-Work documentation for further information.
22	open systems	There is a problem with the Adabas IPC (Interprocess communication) driver. The first two bytes of the Additions 2 field contain an error number.	Shut down the nucleus, if it is still active, and restart it. If the error still occurs, try issuing the command `showipc -kd <dbid>`, then restart the nucleus and reissue the command.
23	Adabas open systems version 3.1 only	There is a problem attaching the Adabas IPC (Interprocess communication) driver's shared memory	Shut down the nucleus, if it is still active, and restart it. If the error still occurs, try issuing the command `showipc -kd <dbid>`, then restart the nucleus and reissue the command.
24	open systems	The ADALNK shared library cannot be loaded correctly.	Check the locations and permissions of the ADALNK shared library.
26	open systems	An IPC (Interprocess communication) problem occurred during open processing, e.g. the shared memory could not be attached.	One reason for these messages may be that someone has deleted an IPC resource. If this is the case, shut down the nucleus, if it is still active, and restart it. If the error still occurs, try issuing the command `showipc -kd <dbid>`, then restart the nucleus and reissue the command. Another reason these messages may occur may be that the IPC resources are not sufficient. In this case, increase the IPC resources, or decrease the values of some nucleus parameters on which the
27	open systems	An IPC (Interprocess communication) problem occurred during a read in the message queue.	
28	open systems	An IPC (Interprocess communication) problem occurred during a write in the message queue.	

Subcode	Occurrence Location	Description	Action
			required amount of IPC resources depends., or stop some other process that also consumes IPC resources. For more information about IPC resources, refer to the section *Increasing System V IPC Resources* in the Adabas open systems installation documentation.
29	UNIX platforms only	IPC (Interprocess communication) resources exist, but the database server was not active.	Issue the command `showipc -kd <dbid>`, restart the nucleus, and reissue the command.
50	mainframe systems	At command completion RSP148 was set but without a subcode. This subcode is set to indicate the command was processed by the target. This often occurs in a Cluster or Parallel Services environment when one of the targets is no longer active.	Contact your Software AG support representative for assistance.
51	mainframe systems	The command router found no suitable target. The target was determined not to be an Adabas Cluster Services or Adabas Parallel Services database.	Contact your Software AG support representative for assistance.
52	mainframe systems	The command router found no suitable target. The target was determined to be an Adabas Cluster Services or Adabas Parallel Services database.	Contact your Software AG support representative for assistance.
53	mainframe systems	The command router found a suitable target but the target became inactive while queuing the command.	Contact your Software AG support representative for assistance.
54	mainframe systems	When the caller attempted to retrieve the results of a completed command the target was no longer active.	Contact your Software AG support representative for assistance.
55	mainframe systems	The target became inactive while the caller was attempting to retrieve the results of a completed command.	Contact your Software AG support representative for assistance.

Subcode	Occurrence Location	Description	Action
58	mainframe systems	An error occurred while POSTing the Adabas nucleus ECB after queuing a command.	This may be seen if the nucleus is terminating. Otherwise contact your Software AG support representative for assistance.
59	mainframe systems	This subcode is set as a default in the first stage of command routing.	Contact your Software AG support representative for assistance.
61	mainframe systems	A command sent from a nucleus to another nucleus caused an ABEND while the caller was attempting to initiate the command. The target may have become inactive. The ABEND was intercepted and recovered.	This may be seen if the target nucleus is terminating. Otherwise contact your Software AG support representative for assistance.
64	mainframe systems	A command sent from a nucleus to another nucleus caused an ABEND while the caller was attempting to retrieve the results of a completed command. The target may have become inactive. The ABEND was recovered by ADAMPM.	This may be seen if the target nucleus is terminating. Otherwise contact your Software AG support representative for assistance.
101/201	mainframe systems	Set in SVCCLU when a specifically designated local nucleus is not available for a physical call. The 201 subcode appears when this subcode is set on a remote node. See the note on ACB(X)ADD2 for information how to identify the remote node.	Contact your Software AG support representative for assistance.
102/202	mainframe systems	Set in SVCCLU when a specifically designated remote nucleus is not available for a physical call. The 202 subcode appears when this subcode is set on a remote node. See the note on ACB(X)ADD2 for information how to identify the remote node.	Contact your Software AG support representative for assistance.
103/203	mainframe systems	Target ID disagreement between IDTE and PLXNUC. The 203 subcode appears when this subcode is set on a remote node.	Contact your Software AG support representative for assistance.

Subcode	Occurrence Location	Description	Action
		See the note on ACB(X)ADD2 for information how to identify the remote node.	
104/204	mainframe systems	Unable to find PLXMAP matching an existing PLXUSER. The 204 subcode appears when this subcode is set on a remote node. See the note on ACB(X)ADD2 for information how to identify the remote node.	Contact your Software AG support representative for assistance.
105/205	mainframe systems	Entire Net-Work unavailable, cannot route existing user to remote nucleus. The 205 subcode appears when this subcode is set on a remote node. See the note on ACB(X)ADD2 for information how to identify the remote node.	Contact your Software AG support representative for assistance.
106/206	mainframe systems	Entire Net-Work unavailable, cannot route new user to remote nucleus. The 206 subcode appears when this subcode is set on a remote node. See the note on ACB(X)ADD2 for information how to identify the remote node.	Contact your Software AG support representative for assistance.
107/207	mainframe systems	No open nucleus available for a new remote user. The 207 subcode appears when this subcode is set on a remote node. See the note on ACB(X)ADD2 for information how to identify the remote node.	Contact your Software AG support representative for assistance.
108/208	mainframe systems	Incorrect PLXMAP update received by LOCAL=YES nucleus. The 208 subcode appears when this subcode is set on a remote node. See the note on ACB(X)ADD2 for information how to identify the remote node.	Contact your Software AG support representative for assistance.
109/209	mainframe systems	An internal command used to synchronize across multiple nodes was received for an Adabas Parallel Services database. Such databases may execute on only one node. Depending on intersystem communications	Contact your Software AG support representative for assistance.

Subcode	Occurrence Location	Description	Action
		timing this may occur as a database is changed from Adabas Cluster Services to Adabas Parallel Services. Otherwise this is a logic error.	
110/210	mainframe systems	Unable to assign specified nucleus to remote user. The physical command arrived via Entire Net-Work for a specific nucleus, but the specified nucleus is on another system. Only one Entire Net-Work transmission is allowed. The 210 subcode appears when this subcode is set on a remote node. See the note on ACB(X)ADD2 for information how to identify the remote node.	Contact your Software AG support representative for assistance.
1019	open systems	No active database found.	Contact your Software AG support representative for assistance.
1020	open systems	The Entire Net-Work relay failed.	Contact your Software AG support representative for assistance.
1021	open systems	EC: Not XTS directory information available.	Contact your Software AG support representative for assistance.
1022	open systems	No context found.	Contact your Software AG support representative for assistance.
1023	open systems	No local database found.	Contact your Software AG support representative for assistance.
1024	open systems	Invalid context found.	Contact your Software AG support representative for assistance.
1025	open systems	General logic error; no XTS found.	Contact your Software AG support representative for assistance.
1026	open systems	A server shutdown occurred.	Contact your Software AG support representative for assistance.

Subcode	Occurrence Location	Description	Action
1027	open systems	A server overload occurred.	Contact your Software AG support representative for assistance.
1028	open systems	The server rejected a call.	Contact your Software AG support representative for assistance.
1029	open systems	No such DBID.	Contact your Software AG support representative for assistance.
1030	open systems	The database is inactive.	Contact your Software AG support representative for assistance.
1031	open systems	No response.	Contact your Software AG support representative for assistance.
1032	open systems	An invalid protocol was found.	Contact your Software AG support representative for assistance.
1033	open systems	An unknown response occurred.	Contact your Software AG support representative for assistance.
1034	open systems	Remote communication is not allowed.	Contact your Software AG support representative for assistance.

Action Review the user actions provided in the explanation above.

Response 149

Origin Open systems only

Explanation A communication error was detected. The Additions 2 field contains the system service completion code which caused the error response.

Subcode	Description
1035	Context allocation failed.
1036	Inconsistent architecture encountered.
1037	XTS error 149/224 occurred.

Action Contact your Software AG technical support representative for assistance.

Response 150

Origin Open systems only

Explanation Too many database nuclei have been used in parallel. The Additions 2 field contains the maximum number of nuclei allowed in parallel.

Action Do not use more database IDs in a single program than the value given in the Additions 2 field.

Response 151

Origin Mainframe and open systems

Explanation A command queue overflow occurred.

Note: If you are running with Entire Net-Work, the leftmost two bytes of the Additions 2 field (in the ACB) or the ACBXERRC field (in the ACBX) may contain the ID of the Entire Net-Work node that issued this response code.

Action The DBA may increase the value of the NC parameter or the command may be issued when there is a lower level of command activity.

If you are running Entire System Server and receive this response code, your database administrator should increase the size of the NCQE parameter. For more information, refer to the startup parameter documentation included in your Entire System Server administration documentation.

Response 152

Origin Mainframe and open systems

Explanation The internal user buffer was not large enough to contain the user buffer areas.

Action On mainframe systems, the DBA should increase the value of the LU parameter used by the Entire Net-Work nucleus.

If you are running Entire System Server and receive this response code, your database administrator should increase the size of the IUBL parameter. For more information, refer to the startup parameter documentation included in your Entire System Server administration documentation.

On open systems, contact your Software AG technical support representative.

Response 153

Origin Mainframe and open systems

Explanation A second Adabas call was issued while the first one was still being processed.

Subcode	Description
1050	A thread is pending.
1051	A user ID is pending.

Action Issue only one call at a time.

Response 154

Origin Mainframe and open systems

Explanation One of the following occurred:

- The Adabas call was canceled by the user (open systems).
- The command was rejected because it resulted in a trigger being fired, but the queue is full at this time. (mainframe)

Action On open systems, no action is required for this informational message. On mainframe systems, retry the command.

Response 155

Origin Mainframe systems only

Explanation A command resulted in a pre-command trigger being fired. The triggered procedure returned a nonzero command, so the command was not executed.

Action Check the Additions 4 field for the error returned from the procedure.

Response 156

Origin Mainframe systems only

Explanation A command resulted in a post-command trigger being fired. The triggered procedure returned a nonzero command, indicating an unsuccessful execution of the procedure.

Action Check the Additions 4 field for the error returned from the procedure.

Response 157

Origin Mainframe systems only

Explanation A command resulted in either a pre- or post-command trigger being fired; however, Adabas Triggers has been shut down with the option to reject all commands that result in a trigger being fired.

Action Determine the cause of the shut-down and resolve the problem. If rejection of commands is not the required action in such a situation, then set the error action field in the Adabas Triggers profile to halt or ignore.

Response 159

Origin Mainframe systems only

Explanation The Adabas link module is missing or invalid. One of the following occurred:

- No Adabas link module is linked to the Natural nucleus and the Adabas link module specified in the Natural profile parameter ADANAME could not be loaded.
- (CICS only) The loaded Adabas link module is macro-level in a command-level only environment.

Action Check the setting of the Natural profile parameter ADANAME and/or provide the correct version of the Adabas link module in one of the current STEPLIBs.

Response 160

Origin Mainframe systems only

Explanation Too many Associator and Data Storage blocks were marked as active in the buffer pool for a single command.

Response 161

Origin Mainframe systems only

Explanation The RABN chain in the header list of the Adabas buffer pool is invalid.

Response 162

Origin Mainframe and open systems

Explanation No additional space is available for the Adabas buffer pool.

Action Increase the value of the ADARUN LBP parameter.

On open systems, because the buffer pool overflow is normally caused by too many blocks in the buffer pool waiting to be written to disk, specifying a low value for the WRITE_LIMIT parameter is recommended.

Response 163

Origin Mainframe systems only

Explanation The RABN to be linked into the RABN header chain is already in the chain.

The following table shows some of the subcodes that may be returned:

Subcode	Description
1	The RABN to be linked into the RABN header chain is already in the chain.
2	A file extent overlap exists such that the same data storage RABN has been assigned to two different files.
3	A supposedly unused data storage RABN is already in use.
4	A file extent overlap exists such that the same Associator RABN has been assigned to two different files.
5	A supposedly unused Associator RABN is already in use.

Action Contact your Software AG technical support representative for assistance.

Response 164

Origin Mainframe systems only

Explanation Too many work areas were allocated for the command.

Response 165

Origin Mainframe and open systems

Explanation A descriptor name was either invalid or did not exist in the descriptor value table (DVT). For expanded files: the descriptor does not exist on all component files.

On open systems, this error may occur during ADAREC generate if one of the following occurs:

- A file was loaded with an incorrect FDT.
- ADAINV was not reexecuted following a stop at a SYNP checkpoint.

In an ACB, the leftmost two bytes of Additions 2 may contain the descriptor name; in an ACBX, the Error Character Field (ACBXERRB) may contain the descriptor name. If this occurred for an expanded file, check to see if there is an FDT mismatch between the components of the file.

On open systems, bytes 3 and 4 of the Additions 2 field contains the name of the descriptor that caused the error.

Action On open systems, if the error is not a handling error, run the INDEX option of ADAVFY and contact your Software AG technical support representative.

Response 166

Origin Mainframe and open systems

Explanation An error was detected in an inverted list index; a descriptor value was not found during a delete operation. The cause may be damage in the Associator.

On open systems, bytes 3 and 4 of the Additions 2 field contains the name of the descriptor that caused the error.

Action On open systems perform the following steps:

1. Locate the descriptor that caused the error in the Additions 2 field of the user control block;
2. Run the VERIFY option of ADAINV for this descriptor and save the output;
3. Reinvert the descriptor;
4. If necessary, restart the database (if this is possible);
5. Send the following information to your Software AG technical support representative:
   - The output of the VERIFY option of ADAINV;
   - All available PLOGs;
   - The FDT of the file containing the error;
   - If the nucleus crashed, the crash directory.

Response 167

Origin Mainframe and open systems

Explanation The meaning of this response code varies, depending on whether you are using Adabas on mainframe systems or Adabas on open systems.

Mainframe Systems

The field in a coupled file does not exist or the coupled list is invalid.

Open Systems

An error was detected in an inverted list index; a descriptor value was already present during an insert operation.

Bytes 3 and 4 of the Additions 2 field contains the name of the descriptor that caused the error.

Action The method of resolving the error varies, depending on whether you are using Adabas on mainframe systems or Adabas on open systems.

Mainframe Systems

Open Systems

Complete the following steps:

1. Locate the descriptor that caused the error in the Additions 2 field of the user control block;
2. Run the VERIFY option of ADAINV for this descriptor and save the output;
3. Reinvert the descriptor;
4. If necessary, restart the database (if this is possible);
5. Send the following information to your nearest support center:
   - The output of the VERIFY option of ADAINV;
   - All available PLOGs;
   - The FDT of the file containing the error;
   - If the nucleus crashed, the crash directory.

Response 168

Origin Mainframe systems only

Explanation An internal command ID required during coupling processing was not found.

Response 170

Origin Mainframe and open systems

Explanation The Adabas RABN required for the command could not be located for one of the following reasons:

- The buffer segment was called with a RABN of zero.
- The specified RABN does not belong to this database and is invalid.

On open systems, the Additions 2 field contains the invalid RABN in 4 byte binary format.

Action On open systems, run the LOST, INDEX and DATA options of ADAVFY for the file in question and contact your Software AG technical support representative.

Response 171

Origin Mainframe systems only

Explanation The constant set used by Adabas could not be located.

Response 172

Origin	Mainframe and open systems
Explanation	On mainframe systems, an ISN was less than the MINISN or greater than the MAXISN setting in effect for the file. On open systems, the maximum possible ISN of the file was reached and no more can be allocated.
Action	On open systems, if the file contains significantly less than 2^{32} records, you should unload the file with ADAULD and reload it with ADAMUP without USERISN. However, you must be aware that problems may arise if the ISNs have semantics for you - if, for example, you use the ISNs to reference records in this file, additional reorganization of these references will be necessary. The alternative to unloading and reloading the data is to split up your data into more than one file, and to adapt your application accordingly.

Response 173

Origin	Mainframe and open systems
Explanation	An invalid Data Storage RABN was detected. On open systems, the Additions 2 field contains the invalid RABN in 4 byte binary format.
Action	On open systems, run the DATA option of ADAVFY for the file in question and contact your Software AG technical support representative.

Response 174

Origin	Mainframe systems only
Explanation	For an L2/L5 command with start ISN, the Data Storage RABN stored in the address converter for the file is invalid.

Response 175

Origin	Mainframe systems only
Explanation	An inconsistency was detected between the index and Data Storage. This response code can be expected when reading a descriptor value for a ciphered file if an incorrect cipher code was used.

Subcode	Meaning
99	On logical reads and simple searches without hold, the index value is compared with the value from the data record to ensure consistency. When the values do not match, the read or search is repeated in order to avoid the effects of a possible parallel update. If the values still do not match, response 175 is given.

Action Run the ADACHK utility against the file, and contact your Software AG technical support representative.

Response 176

Origin Mainframe and open systems

Explanation Either an inconsistency was detected in an inverted list or an internal error occurred during inverted list processing.

On open systems, the Additions 2 field contains the inconsistent RABN in 4-byte binary format.

On mainframe systems, the following possible subcodes are associated with this response code:

Subcode	Meaning
2	Bad index
3	Invalid search request
4	Invalid format indicator or field not found in FDT/SDT
11	Invalid search request
12	Bad index block
13	Bad UI block
14	Mismatch block length
15	Bad MI block
16	Mismatching block length
17	Bad NI block
18	Bad ISN count
21	Bad index block
22	Mismatching block length
23	Invalid ISN count
29	Inactive index block
31	Bad index block
32	Mismatching block length
33	Invalid ISN count

Subcode	Meaning
39	Inactive index block
41	Bad index block
42	Mismatching block length
43	Bad MI block
44	Bad NI block
81	Invalid level indicator
82	Bad element position in block
83	Position in block did not match element lengths
84	Bad MI block
85	Bad NI block
86	Bad NI block
87	Invalid ISN count
88	Position in block did not match element lengths
89	Index block not active
91	Wrong level
92	Mismatching block length

Action

On mainframe systems, run an appropriate ADACHK utility function to determine whether an inconsistency exists in an inverted list. If not, contact your local Software AG technical support representative. Make sure to report the subcode to your Software AG technical support representative.

On open systems, check if an autorestart or an ADAREC REGENERATE have disabled the index. If not, run the INDEX option of ADAVFY for the file in question. If the INDEX option signaled errors, you should recreate the entire inverted list with ADAINV REINVERT ALL or contact your Software AG technical support representative.

Response 177

Origin

Mainframe and open systems

Explanation

A record could not be found in the Data Storage block in which it should have been contained as indicated by the address converter. On mainframe systems, if this response code is returned to the ADAULD UNLOAD utility function with the parameter SORTSEQ, the file might be inconsistent and data lost.

Subcode 19 is issued because the base file record was not found in Data Storage. At the end of a LOB update in the LOB file, the associated base file record was no longer present in the data storage block.

Action

On mainframe systems, check the file with the ADACHK ACCHECK utility function and contact your Software AG technical support representative.

On open systems, run the AC option of ADAVFY for the file in question and contact your Software AG technical support representative.

Response 178

Origin Mainframe systems only

Explanation An internal error occurred when updating a multiple-value field:

Subcode	Meaning
1	Inconsistency in descriptor value table (DVT).
2	An inconsistency was detected between the field definition table (FDT) and the internal format buffer.
3	Inconsistency when updating a phonetic descriptor.

Response 179

Origin Mainframe systems only

Explanation Internal error; identifier could not be found in Work part 3.

Response 181

Origin Mainframe systems only

Explanation Autobackout was executed and the start of a transaction could not be located.

Response 182

Origin Mainframe and open systems

Explanation Necessary ET data was not found in the appropriate Work block.

Action On open systems, save WORK1 and send it to your nearest Software AG technical support representative together with a description of what caused the pending autorestart and, if possible, the dump directory and the PLOG. Then restore and regenerate the database.

Response 183

Origin Mainframe systems only

Explanation An internally assigned number for a database I/O operation was detected as invalid.

Response 184

Origin Mainframe systems only

Explanation A phonetic field name could not be found.

Response 185

Origin Mainframe systems only

Explanation The ADAM field could not be found in the compressed record.

Response 186

Origin Mainframe systems only

Explanation A wrong cipher code has been specified or a compressed data record is bad (does not conform to the Field Description Table).

The leftmost two bytes of the ACB's Additions 2 field or the ACBX's Error Subcode (ACBXERRC) field contain the field or descriptor name where the error was detected. The rightmost two bytes of the same ACB or ACBX field contain an internal code identifying the routine that detected the error.

Action If the file that was accessed when this response code occurred is ciphered, check whether the correct cipher code has been specified. Correct the cipher code, if necessary.

If the error is not due to an incorrect cipher code, run the ADACMP DECOMPRESS INFILE utility function to unload and decompress all records of the file. ADACMP will write records where it detects errors to its error dataset (DD/FEHL). Contact your Software AG technical support representative for assistance.

Response 187

Origin Mainframe systems only

Explanation The response indicates that an invalid Data Storage block was detected while locating a record by ISN. One of the following error conditions occurred:

- An invalid block length (negative) was encountered.
- An invalid record length (not positive) was encountered.
- The sum of the record lengths is not equal to the block length plus 4.

The Additions 2 field contains the Data Storage block number where the error was detected.

Action Contact your Software AG technical support representative for assistance.

Response 196

Origin Open systems only

Explanation Referential integrity has been violated. Bytes 3 and 4 of the Additions 2 field contain the name of the violated constraint. Bytes 1 and 2 of the Additions 2 field contain the reason as a two-byte binary number:

Subcode	Meaning
1	Required ISN in hold by another user
3	Maximum number of ISNs held by one user is reached
5	Check integrity mismatch, required value not found during check
7	Double update to a record within a cascade detected
8	Limit of stacked commands reached

Action Handle the referential integrity violation, for example, write an error message.

Response 197

Origin Mainframe systems only

Explanation The DEUQ pool is too small.

Action Increase the ADARUN LDEUQP parameter.

Response 198

Origin Mainframe systems only

Explanation An attempt was made to duplicate a descriptor value for a unique descriptor. In an ACB, the leftmost two bytes of the Additions 2 field may contain the descriptor name; in an ACBX, the Error Character Field (ACBXERRB) may contain the descriptor name. The following subcodes may accompany this response code:

Subcode	Meaning
1	Unique descriptor insert failed; value already exists in the index.
2	Unique descriptor insert failed; value in use by another user on this nucleus.
3	Unique descriptor insert failed; value in use by another user on another cluster nucleus.
4	Unique descriptor insert failed; the value we are attempting to insert in the NI block is already there.

Response 199

Origin Mainframe systems only

Explanation An inconsistency in the inverted list index was found during an update operation. In an ACB, the leftmost two bytes of Additions 2 may contain the descriptor name; in an ACBX, the Error Character Field (ACBXERRB) may contain the descriptor name. This response code can also occur if UTYPE=EXU was specified for an ADARES BACKOUT operation that uses the sequential (SIBA) log.

Response 200

Origin Mainframe and open systems

Explanation Either an invalid cipher code or an Adabas SAF Security or Adabas security violation was detected.

The command could not satisfy the necessary security checks. This response code may be accompanied by one of the following subcodes:

Subcode	Meaning
0	A standard user check failed.
1	There is no free user file cache entry for a workstation user.
2	A cross-level security check failed.
3	No security information is available for the command.
4	A timeout occurred during a workstation logon.
5	An internal SAF Kernel error occurred.
6	A failure occurred during a newcopy/restart operation. The nucleus terminates.
7	A request to make an ABS security check was not of the correct format.
8	A security violation occurred while a file was being loaded into an existing expanded file chain.
11	User is not permitted to do a SEARCH command.
12	User is not permitted to do a SEARCH command.
13	User is not permitted to do a SEARCH command.
14	An invalid cipher code was encountered during update.
15	User is not permitted to read FDT (LF command).
16	Remote non-mainframe client has supplied a new password or passphrase but there is a mismatch with the old: ■ old password with new passphrase ■ old passphrase with new password Passwords and passphrases should not be mixed.

Subcode	Meaning
17	Remote non-mainframe client has supplied a password phrase but the detected version of SAFPSEC does not support password phrases. Either: ■ SAFPSEC is an old version that does not support password phrases or ■ SAFPSEC is capable of supporting passphrases but has been assembled with an incorrect REL= parameter (see the installation documentation for more details)
21	User´s SAF ID is unknown.
22	User´s SAF ID has changed.
24	Remote non-mainframe client authentication failure; user ID is not defined.
25	Remote non-mainframe client authentication failure; invalid password / password phrase.
26	Remote non-mainframe client authentication failure; invalid new password / new password phrase.
27	Remote non-mainframe client authentication failure; user ID is revoked.
28	Remote non-mainframe client authentication failure; logon not allowed at this time/date.
29	User does not have permission to perform the administration function.
30	A utility function-level authorization check failed. The user is not permitted to perform this utility function.
1060	Open systems ADASAF phase 1 failed.
1061	Open systems ADASAF phase 1 failed with response.
1062	Open systems ADASAF phase 2 failed.

For more information about Adabas SAF Security, read the Adabas SAF Security documentation.

Action Resolve the security error, perhaps by simply supplying the correct password.

Response 201

Origin Mainframe and open systems

Explanation The specified password was not found.

Action Supply the correct password.

Response 202

Origin	Mainframe and open systems
Explanation	An attempt was made to use a file for which the user is not authorized, or the file password is being changed, or, if Adabas Security is being used, the file has attached Security By Value on this field.
Action	Either correct the authorization, or retry the operation with the new password, or, if Adabas Security is being used, remove the Security By Value on the field before the operation on the file can be retried.

Response 203

Origin	Mainframe systems only
Explanation	An attempt was made to delete a record in a file for which the user is not authorized.

Response 204

Origin	Mainframe and open systems
Explanation	On mainframe systems, a password pool overflow occurred. On open systems, the password supplied is already in use.
Action	On open systems, change the password to one that is not already existing. On mainframe systems, check and possibly increase the value specified for ADARUN LCP parameter in the Adabas nucleus.

Response 207

Origin	Mainframe systems only
Explanation	Adabas SAF Security completed phase 1 of logon and requested phase 2. This is an internal Adabas SAF Security and ADALNK two-phase response code for a remote workstation logon. This code is normally not displayed or presented. For more information, read your Adabas SAF Security documentation.
Action	Send a phase 2 logon request to Adabas SAF Security.

Response 208

Origin	Mainframe and open systems
Explanation	A remote non-mainframe client is required to perform authentication before they can access an Adabas SAF Security protected resource. This response code is related to this requirement.

Subcode	Meaning
2	A remote non-mainframe client has attempted to access an Adabas SAF Security protected resource without first authenticating.
1066	Open systems ADASAF phase 1 error exit.
1067	Open systems ADASAF phase 2 error exit.

Action If this response code is reported by a customer's application, then it indicates that the appropriate Adabas link routine is not installed. For more information, refer to *Remote Workstation Logon* in the *Adabas SAF Security Operations* documentation.

If this response code is reported by Adabas Manager, ensure Adabas Manager is prompting the client for their mainframe credentials and, if not, contact your Software AG support representative.

Response 209

Origin Mainframe systems only

Explanation Adabas SAF Security detected an expired password on the server. The workstation user's password has expired. This code is normally not returned to the application. Instead the workstation user is prompted to enter a new password.

Action Create a valid password on the server for ACF2, RACF, or Top Secret. Entire Net-Work users may use the Adabas SAF Security feature.

Response 210

Origin Mainframe and open systems

Explanation On mainframe systems, a logical ID was greater than 255 (internal error).

Note: If you are running with Entire Net-Work, the leftmost two bytes of the Additions 2 field (in the ACB) or the ACBXERRC field (in the ACBX) may contain the ID of the Entire Net-Work node that issued this response code.

On open systems, a receive buffer was lost in NETRDI.

Action On open systems, the DBA may increase the value of the NAB or NC parameters in the NETRDI in the target node.

Response 211

Origin Mainframe and open systems

Explanation On mainframe systems, an invalid ID table index in the UB (internal error) occurred.

Note: If you are running with Entire Net-Work, the leftmost two bytes of the Additions 2 field (in the ACB) or the ACBXERRC field (in the ACBX) may contain the ID of the Entire Net-Work node that issued this response code.

On open systems, a remote utility cannot be executed because OPTIONS = LOCAL_UTILITIES is set for the database.

Action On open systems, contact the DBA of the remote database.

Response 212

Origin Mainframe and open systems

Explanation On mainframe systems, an invalid input/output buffer was encountered for an internal command.

On open systems, a requested function is not implemented in the target architecture.

Action On open systems, execute the utility on the target node.

Response 213

Origin Mainframe systems only

Explanation ID table not found (SVC not properly installed).

Note: If you are running with Entire Net-Work, the leftmost two bytes of the Additions 2 field (in the ACB) or the ACBXERRC field (in the ACBX) may contain the ID of the Entire Net-Work node that issued this response code.

The following table describes the possible subcodes that might occur if an Adabas DBID/SVC routing table error occurs:

Subcode	Meaning
16	The specified SVC number does not correspond to a currently installed SVC on the z/OS or z/VSE system. Check to be sure that the specified SVC number is correct and, if it is, ensure that an Adabas SVC is installed using that SVC number.
20	The specified SVC number corresponds to an installed SVC on the z/OS or z/VSE system, but the SVC is not an Adabas SVC. Ensure that the provided SVC number is correct and, if it is, determine why the SVC installed for that number is not an Adabas SVC for z/OS or z/VSE.

Action Inform the DBA. The Adabas installation procedure was not properly executed.

Response 214

Origin Mainframe systems only

Explanation Internal command issued from Adabas version 4 ADALNK.

Response 215

Origin Open systems only

Explanation The Adabas interface (adalnkx, adalnk, adalnknc) used by the application program, or the Entire Net-Work version used is not supported by the Adabas nucleus. For example, the Adabas nucleus Version 6.1 does not support the Adabas interface of Version 5.1. If a 32-bit version and a 64-bit version of Adabas exists for an operating system, the 64-bit nucleus does not support the Adabas interface of the 32-bit version - 32-bit applications must use the 32-bit mode Adabas interface of the 64-bit version.

Note: The compatible Entire Net-Work versions supported by an Adabas open systems version are documented in the Adabas open systems Release Notes.

Action If you are using an incompatible version of Entire Net-Work, upgrade it to a compatible version. Check the definition of the environment variable PATH (Windows) or LD_LIBRARY_PATH (UNIX). If the application has been linked with the s-bit on UNIX, it is necessary that the correct Adabas interface has been installed with `$SAG = /opt/softwareag`.

Response 216

Origin Mainframe and open systems

Explanation Command rejected by user exit.

Note: If you are running with Entire Net-Work, the leftmost two bytes of the Additions 2 field (in the ACB) or the ACBXERRC field (in the ACBX) may contain the ID of the Entire Net-Work node that issued this response code.

Subcode	Meaning
1070	UEX_ACBX_0 command rejected.

Response 217

Origin Mainframe systems only

Explanation Command rejected by user exit.

Note: If you are running with Entire Net-Work, the leftmost two bytes of the Additions 2 field (in the ACB) or the ACBXERRC field (in the ACBX) may contain the ID of the Entire Net-Work node that issued this response code.

Response 218

Origin Mainframe systems only

Explanation The following table describes the subcodes that appear with this response code, clarifying why the response was received.

Subcode	Meaning
00 or 01 or 02	The UB (TP monitor user block) pool is too small. There must be at least one user block for each concurrent user. This is controlled by the TP monitor link routines. The GETMAIN for the UB failed.
13 or 15 or 17	An error has occured during the freeing of the UB and Work areas for a TL call. This may indicate an internal product error or a TP monitor storage overlay. Contact Software AG technical support for assistance.
72	An IPC (Interprocess communication) message call parameter error occurred. This may indicate an internal product error or a TP-monitor storage overlay. Contact Software AG technical support for assistance.
73	The IPC message caller did not provide a pointer to the extended user ID block. This is probably an internal product error. Contact Software AG technical support.
74	An IPC message internal work area is corrupted. This may indicate an internal product error or a TP monitor storage overlay. Contact Software AG technical support for assistance.
75	An IPC message call parameter error occurred. This is probably an internal product problem. Contact Software AG technical support for assistance.
76	The extended user ID data provided to the IPC Message Call is either binary zeroes or blank. This is probably and internal product error. Contact Software AG technical support.
77	A getmain failed for the work area used in an IPC Message Call. Determine why the TP monitor is running short of storage. The storage will be acquired in the AMODE of the calling program, usually 31-bit for Natural transactions.
78	An invalid IPC work area has been provided by the caller for a TS call. This is probably and internal product error. Contact Software AG technical support.
79	An error occured during freemain done for a TS call. This may indicate an internal product error or a TP monitor storage overlay. Contact Software AG technical support for assistance.
100	Unable to communicate with the Adabas Directory Server. Check the LTCPSET parameters ADIHOST and ADIPORT.
101	An error occurred when closing a socket. Contact Software AG technical support for assistance.
102	A socket could not be allocated. Contact Software AG technical support for assistance.

Subcode	Meaning
103	The TCP/IP socket could not connect to the database. Check that the database is active.
104	Unable to establish a context on the database. Contact Software AG technical support for assistance.
110	Internal error processing a parameter list. Contact Software AG technical support for assistance.
111	An error occurred when sending data on a socket. Contact Software AG technical support for assistance.
120	Unable to receive results due to no database context. Contact Software AG technical support for assistance.
121	An attempt has been made to receive results from a database which has not previously been contacted. Contact Software AG technical support for assistance.
122	Unable to receive results due to no client context on the database. Contact Software AG technical support for assistance.
123	An error occurred when receiving data on a socket. Contact Software AG technical support for assistance.
130	The RCVTIME has been exceeded whilst waiting to receive data on a socket.

Action

In the case of subcode zero, 01 or 02 increase the UB pool by respecifying the NUBS parameter in the link routines. See the LGBLSET macro information in the Adabas Installation documentation.

In all other cases, either the program executing the IPC (Interprocess communication) message has provided invalid parameters, or there are internal product problems such as storage overlay conditions. Contact Software AG technical support for assistance.

Response 219

Origin

Mainframe systems only

Explanation

This response code should only occur when Adabas Transaction Manager is being used.

Subcode	Meaning
2	The global transaction is not in the status that allows the call.
3	Two transaction ID (XID) entries exist.
4	The "R" and "J" options are not supported; or this is not a global transaction. The transaction ID (XID) does not exist or cannot be found (or example, when the given XID does not belong to the UQE).

Subcode	Meaning
5	The record or value buffer definition may be invalid; for example, the length size may be invalid (less than or equal to 144 bytes); or the value buffer content may be invalid; for example, it may not contain a valid transaction ID (XID).
6	The user is not an update or ET user or is already involved in a global transaction or the user is already on PET (preliminary end-of-transaction) status.
7	A protocol error occurred: The user has been copied to Work 4 or the transaction was backed out.
8	A protocol error occurred: The transaction was terminated or the user has no transaction ID (XID) or the recover call for an active user is not permitted.
9	The system is currently locked due to a pending Work area 4 or DDWORKR4 overflow.
10	The call is not permitted; either ADAEND or an ET-sync point is in process for the nucleus. Force the ATM nucleus to backout (BT) the transaction.
11	The user has not made any updates. A preliminary ET command, therefore, is not permitted.
12	A logic error occurred.
20	The transaction ID (XID) is unknown. This error occurs only in a cluster environment.

Response 220

Origin Mainframe systems only

Explanation The request was rejected by Entire Net-Work due to a shortage of short term buffers.

Note: If you are running with Entire Net-Work, the leftmost two bytes of the Additions 2 field (in the ACB) or the ACBXERRC field (in the ACBX) may contain the ID of the Entire Net-Work node that issued this response code.

Action For BS2000 systems running Sockets 2.2 or later, check the address space limit using the `SHOW-USER-ATTRIBUTES` command in the field ADDRESS-SPACE-LIMIT (the value is in megabytes). If necessary, increase it using the `MODIFY-USER-ATTRIBUTES` command from a privileged user ID.

For BS2000 systems running Sockets 2.1 or earlier, increase the CMSIZE parameter to enlarge the common memory pool, as long as there is enough room in the address space. Then restart Entire Net-Work.

For z/OS and z/VSE, increase the region size.

Response 221

Origin Mainframe systems only

Explanation The LU size of the remote partner is smaller than the size required for the Adabas request.

Action Either increase the size specified for the LU= parameter on the remote system, or modify the application to reduce its buffer sizes.

Response 222

Origin Mainframe systems only

Explanation An error was detected in the ACB or ACBX of an Adabas call by Entire Net-Work. The following are the subcodes and their meanings:

Subcode	Meaning
1	A buffer length was corrupted in the ACB or an ABD if ACBX is used. To avoid storage corruption, the corrupted length is set to zero. The leftmost two bytes of the ACB Additions 2 field (ACBADD2) or the ACBX Subcomponent Response Code field (ACBXSUBR) contain the Node ID of the Entire Net-Work node that issued this response code.

Action Contact your Software AG technical support representative.

Response 223 (reserved)

Response 224

Origin Mainframe and open systems

Explanation An Adabas command has been timed out by Entire Net-Work. The request waited for a reply for a longer time period than specified by the REPLYTIM parameter in either the Entire Net-Work NODE statement or the SET operator command. The reply may be delayed or lost due to a target malfunction, or because of a connecting link failure. If you are using Natural, and all connections are verified, check the ADAMODE setting. The ADAMODE=0 setting is the only option Entire Net-Work supports.

Note: If you are running with Entire Net-Work, the leftmost two bytes of the ACB Additions 2 field (ACBADD2) or the ACBX Error Subcode field (ACBXERRC) may contain the ID of the Entire Net-Work node that issued this response code.

Subcode	Meaning
1	If the message was compressed using zEDC compression services and the attempt to decompress the message failed, subcode 1 is placed in the rightmost two bytes of the ACB Additions 2 field (ACBADD2) or the ACBX Subcomponent Response Code field (ACBXSUBR).
1076	An XTS timeout error occurred.

Action Check the node and remote database or contact your database administrator for assistance.

Response 225

Origin Mainframe and open systems

Explanation A command was issued from a server, such as an Adabas nucleus, to another server, such as Entire Net-Work. The command did not complete within a prescribed time period. The issuer proceeds and no longer expects a response to the command.

Note that the command may still execute in the target. There will be no notification to the issuer if it does. The target may display message ADAM92, User Gone, if the target attempts to notify the issuer of command completion.

The subcode identifies the environment from which the command was issued.

Subcode	Issuer
1	ADAMPM
2	Adabas nucleus, thread-synchronous command
3	Adabas nucleus, not thread-synchronous. Under z/OS, the command was TCB-synchronous.

Action Contact your Software AG technical support representative for assistance if the reason for the command's failure to complete cannot be identified.

Response 226 - 227 (reserved)

Response 228

Origin Mainframe systems only

Explanation This response is issued by an Adabas link routine. It indicates that an ASCII-formatted user request has been issued against an EBCDIC-formatted database that is not properly configured to handle the translation:

1	The SVC is not a valid Adabas version 7 SVC.
2	The database is not UES-enabled.

Action Ensure that your Adabas installation is for a supported version and that the database is UES-enabled. Refer to the UES information.

Response 229

Origin Mainframe systems only

Explanation The Entire Net-Work 5 convertor detected an inconsistency or error in the application format buffer or search buffer and is unable to correctly translate the user's data.

Response 230

Origin Open systems only

Explanation The protocol defined by the X/Open XA specification is violated. This happens, for example, if a user tries to issue an ET call for an XA transaction.

Action Follow the XA specification.

Response 231-239

Explanation These response codes are assigned in some Adabas user exits, and have meanings as defined by the user. One example is the response code in the ADALOG log data field issued by user exit 4.

Action Refer to the description of user exits in the Adabas user, hyperdescriptor, and collation descriptor exits documentation for more information.

Response 240

Origin Mainframe systems only

Explanation Adabas Transaction Manager encountered an error. The error code can be found in the Adabas control block Additions 2 field, in the low-order (rightmost) two bytes. A response code may occur in the first two bytes of the Additions 2 field.

Action Check the meaning of the Adabas Transaction Manager error code. If the cause of the problem is not apparent, contact your Software AG technical support representative.

Response 241

Origin Mainframe and open systems

Explanation The explanation for this response code varies, depending on whether you are using Adabas on mainframe systems or Adabas on open systems.

Mainframe Systems

Adabas Transaction Manager (ATM) received an unexpected Adabas response code. The subcode and response code can be found, in that order, in the Adabas control block Additions 2 field. If a positive response code value appears in the Additions 2 field, the response code was detected by the ATM transaction manager. If a negative response code value appears in the Additions 2 field, take its complement: this is the response code received by the client proxy's attempt to communicate with the ATM transaction manager.

Open Systems

The system cannot load the specified user exit shared library or dynamic load library, or the specified function does not exist in this shared library or dynamic load library. If the function does not exist in the shared library or dynamic load library, bytes 1 and 2 of the Additions 2 field contain the system's error number in binary format, otherwise these two bytes contain 0. Bytes 3 and 4 of the Additions 2 field contains the number of the ADALNK user exit which failed in binary format.

Subcode	Meaning
1080	UEX_ACBX_0 load failed.
1081	UEX_ACBX_1 load failed.

Action

Mainframe Systems

Check the meaning of the Adabas response code and subcode. If the cause of the problem is not apparent, contact your Software AG technical support representative.

Open Systems

Make sure that you use the correct environment variable for the user exit.

Response 242

Origin Mainframe and open systems

Explanation The explanation for this response code varies, depending on whether you are using Adabas on mainframe systems or Adabas on open systems.

Mainframe Systems

The Adabase Transaction Manager (ATM) or ATM client proxy was unable to determine the status of the caller's transaction. There might be an ATM error code in the Adabas control block Additions 2 field, in the low-order (rightmost) two bytes.

Open Systems

A double allocation has been detected between two or more files or a file and the free space table.

Action

Mainframe Systems

Check the meaning of the Adabas Transaction Manager error code, if one is present. Otherwise, determine the status of the global transaction using Online Services. If the required action is not apparent, contact your Software AG technical support representative.

Open Systems

Run ADAVFY without any options to find out which parts of which files are affected. Contact your nearest support center with the output from ADAVFY.

Response 243

Origin Mainframe and open systems

Explanation The explanation for this response code varies, depending on whether you are using Adabas on mainframe systems or Adabas on open systems.

Mainframe Systems

The Adabas Transaction Manager (ATM) or client proxy received an unsolicited syncpoint request. The action taken or the status of the global transaction that was open is indicated by a subcode in the Adabas control block Additions 2 field, in the low-order (rightmost) two bytes.

Subcode	Explanation and Recommended Action
1	The unsolicited syncpoint request was accepted. The status of the current global transaction is not known. Use Online Services to determine the status of the global transaction.
2	The unsolicited syncpoint request was accepted. The client session's global transaction has been committed.
3	The unsolicited syncpoint request was accepted. The client session's global transaction has been backed out.
4	The unsolicited syncpoint request was accepted. The client session's global transaction had mixed completion (partially backed out, partially committed).
5	The unsolicited syncpoint request was accepted. The client session's global transaction is in backout.
6	The unsolicited syncpoint request was accepted. The client session's global transaction is in commit.
7	The unsolicited syncpoint request was accepted. The client session had no global transaction open.
12	The unsolicited syncpoint was attempted, but ATM returned response code 148 (ADARSP148) so the outcome is not known.
16	The unsolicited syncpoint request was rejected.

Open Systems

An invalid FCB extent has been detected for a file.

Action

Mainframe Systems

Review the Adabas Transaction Manager's `TMSYNCMGR` parameter and the `TransactionControl`, `Client-sideTransactionManager`, and `HostSystemTransactionManager` client runtime controls for the failing job.

Open Systems

Contact your nearest support center.

Response 245

Origin

Mainframe and open systems

Explanation

On mainframe systems, this response code is issued for communication problems between add-on products that use the system coordinator (COR) interface to Adabas; that is, Adabas Fastpath, Adabas Vista, Adabas SAF Security, and Adabas Transaction Manager.

Subcode	Meaning
1	Internal error.
2	A required module could not be loaded. This is probably an installation error.

On open systems, pending utility entries exist in the UCB.

Action

On mainframe systems, for subcode 1, contact your Software AG technical support representative. For subcode 2, consult the installation instructions for the add-on product.

On open systems, delete the entries with RESET = UCB before executing RECOVER, but ensure that the utilities which own the UCB entries are no longer running.

Response 246

Origin

Open systems only

Explanation

Utility communication block (UCB) overflow.

Action

Execute the RESET function of ADADBM to remove unused entries from the utility communication block if the utilities that own them are no longer running.

Response 247

Origin Open systems only

Explanation Correct ID not found in the utility communication block.

Action The utility cannot be restarted. Delete the utility communication block entry and rerun the utility.

Response 248

Origin Mainframe and open systems

Explanation This response code is returned by Data Archiving for Adabas processing. Subcodes are returned in big-endian byte order in the Additions-2 field of the Adabas control block and conform to the format 0xhhhhChhh where C is the subcode category. The subcodes below are listed in Category order.

Category 0 subcodes:

Subcode	Meaning
1 (0x00000001)	No architecture/version information returned by Adabas in the response to the `OP` command. *Action:* Contact your Software AG technical support representative.
2 (0x00000002)	Cannot recall archived data because the architecture of the target database is not compatible with the architecture to the original database. *Action:* Choose a different mixture.
3 (0x00000003)	Either the Extractor/Accumulator versions are not compatible or the Adabas version of the database being archived from or recalled to is not supported. *Action:* Contact your Software AG technical support representative.
4 (0x00000004)	The FDT of the file into which data is being recalled or archived is not compatible with the FDT of the original file. *Action:* Check that FDTs of the files are compatible.
5 (0x00000005)	Cannot coerce a value specified for the extraction criteria to the specified type. *Action:* Check that the values and types defined for the extraction criteria are correct.
6 (0x00000006)	Date specified for the extraction criteria is prior to the earliest supported data. *Action:* Contact your Software AG technical support representative.

Subcode	Meaning
7 (0x00000007)	Unsupported date/time pattern in extraction critiera. *Action:* Set a correct pattern in the extraction criteria. Contact Software AG Support.
8 (0x00000008)	Database from which data is being archived or recalled into is not on the local machine. *Action:*Check the action is correctly configured. The source database must be local to the Extractor and target database local to the Accumulator.
9 (0x00000009)	Cannot load the Adabas System Coordinator library. *Action:* Check that Adabas System Coordinator is installed correctly.
10 (0x0000000A)	An incompatible version of Adabas System Coordinator is installed. *Action:* Contact your Software AG technical support representative.
11 (0x0000000B)	An incompatible version of Adabas System Coordinator is installed. *Action:* Contact your Software AG technical support representative.
12 (0x0000000C)	Cannot parse FDT. *Action:* Contact your Software AG technical support representative.
13 (0x0000000D)	Cannot generate FDU from FDT. *Action:* Contact your Software AG technical support representative.
14 (0x0000000E)	Cannot create format buffer for the whole FDT. *Action:* Contact your Software AG technical support representative.
15 (0x0000000F)	PE or MU field(s) not defined correctly. *Action:* Check that the PE/MU fields in the Extractor/Accumulator filtering and Archive search fields are defined correctly.
16 (0x00000010)	Field does not exist in the FDT. *Action:* Check that the fields in the Extractor/Accumulator filtering and Archive search fields are defined correctly.

Subcode	Meaning
17 (0x00000011)	Recall of a filtered archive using the 'Replace duplicate unique descriptors' option failed because the format/record buffer could not be parsed. *Action:* Contact your Software AG technical support representative.
18 (0x00000012)	Recall of a filtered archive using the 'Replace duplicate unique descriptors' option failed because the conflicting descriptor does not appear in the format/record buffer. *Action:* Choose different recall options for handling duplicate unique descriptors or ensure that all UQ fields are included in a filtered archive.
19 (0x00000013)	Internal record buffer overflow. *Action:* Contact your Software AG technical support representative.
20 (0x00000014)	Internal format buffer overflow. *Action:* Contact your Software AG technical support representative.
21 (0x00000015)	Internal search buffer overflow. *Action:* Contact your Software AG technical support representative.
22 (0x00000016)	Internal value buffer overflow. *Action:* Contact your Software AG technical support representative.
23 (0x00000017)	No extraction criteria were specified and there are no DE fields in the FDT. *Action:* Contact your Software AG technical support representative.
24 (0x00000018)	No Computer record for the current Adabas System Coordinator Group Leader. *Action:* Check that the correct Repository is being used and that the Adabas System Coordinator Computer is still defined.
25 (0x00000019)	No archive service definition for the Extractor/Accumulator computer. *Action:* Check that the correct Repository is being used and that the Data Archiving Service is still defined for Adabas System Coordinator Daemon.

Subcode	Meaning
26 (0x0000001A)	No Computer or Daemon record for the Extractor/Accumulator computer. *Action:* Check that the correct Repository is being used and that the Adabas System Coordinator Computer and Daemon is still defined.
27 (0x0000001B)	No Action record found for the current archive/recall/search operation. *Action:* Check that the correct Repository is being used and that the Action record is still defined.
28 (0x0000001C)	No Vault Validation record found. *Action:* Check that the validation is correctly configured for this vault.
29 (0x0000001D)	No Vault PATH information for this computer. *Action:* Check that a Vault Path is defined for the Extractor, Accumulator and ADR Service computers.
30 (0x0000001E)	Attempt to recall an archive using Extractor/Accumulator computers that not sharing the same Repository. *Action:* Extractor/Accumulator computers for a recall must share the same Repository.
31 (0x0000001F)	No Plan record found for the current archive/recall/search operation. *Action:* Check that the correct Repository is being used and that the Plan record is still defined.
32 (0x00000020)	Archive failed due to invalid/unsupported Extractor settings. *Action:* Contact your Software AG technical support representative.
33 (0x00000021)	Archive failed due to invalid/unsupported Transfer settings. *Action:* Contact your Software AG technical support representative.
34 (0x00000022)	Archive failed due to invalid/unsupported Accumulator settings. *Action:* Contact your Software AG technical support representative.
35 (0x00000023)	Recall failed due to invalid or unsupported Extractor settings. *Action:* Contact your Software AG technical support representative.
36 (0x00000024)	Recall failed due to invalid or unsupported Transfer settings.

Subcode	Meaning
	Action: Contact your Software AG technical support representative.
37 (0x00000025)	Recall failed due to invalid or unsupported Accumulator settings. *Action:* Contact your Software AG technical support representative.
38 (0x00000026)	Extractor terminated because the Accumulator is not active. *Action:* Check the response and subcode for the Accumulator in Current or Completed Activities.
39 (0x00000027)	Accumulator timed-out waiting for the Extractor. *Action:* Check the response and subcode for the Extractor in Current or Completed Activities.
40 (0x00000028)	Message protocol error/incompatibility. *Action:* Contact your Software AG technical support representative.
41 (0x00000029)	Message protocol error/incompatibility. *Action:* Contact your Software AG technical support representative.
42 (0x0000002A)	Message protocol error/incompatibility. *Action:* Contact your Software AG technical support representative.
43 (0x0000002B)	Message protocol error/incompatibility. *Action:* Contact your Software AG technical support representative.
44 (0x0000002C)	Message protocol error/incompatibility. *Action:* Contact your Software AG technical support representative.
45 (0x0000002D)	Timeout waiting for lock on archive in Vault. *Action:* Retry the operation and/or check for competing operations.
46 (0x0000002E)	Version mismatch between Data Archiving for Adabas runtime and Vault contents. *Action:* Contact your Software AG technical support representative.
47 (0x0000002F)	Invalid/corrupt archive in Vault. *Action:* Contact your Software AG technical support representative.

Subcode	Meaning
48 (0x00000030)	Archive in Vault contains data not supported by this version of the Data Archiving for Adabas runtime. *Action:* Contact your Software AG technical support representative.
49 (0x00000031)	Archive size would exceed limit. *Action:* Contact your Software AG technical support representative.
50 (0x00000032)	Invalid/unsupported Vault operation. *Action:* Contact your Software AG technical support representative.
51 (0x00000033)	Archive does not exist in Vault. *Action:* Contact your Software AG technical support representative.
52 (0x00000034)	Vault path does not exist. *Action:* Check that the Vault Path defined for the Extractor, Accumulator and ADR Service computers is correct.
53 (0x00000035)	Access denied to Vault Path. *Action:* Check that the Extractor, Accumulator and ADR Service computers have the correct filesystem permissions for the Vault Path.
54 (0x00000036)	Logical error manipulating Vault contents. *Action:* Contact your Software AG technical support representative.
55 (0x00000037)	Extractor/Accumulator failed to load. *Action:* Check the response and subcode for the Extractor/Accumulator in Pending, Current and Completed Activities.
56 (0x00000038)	Extractor/Accumulator failed to load. *Action:* Contact your Software AG technical support representative.
57 (0x00000039)	Length of compressed record exceeds limit. *Action:* Contact your Software AG technical support representative.
58 (0x0000003A)	Length of decompressed record exceeds limit. *Action:* Contact your Software AG technical support representative.

Subcode	Meaning
59 (0x0000003B)	Cannot determine the default codepage for the system. *Action:* Contact your Software AG technical support representative.
60 (0x0000003C)	Invalid/unsupported codepage specified for archive or recall. *Action:* Check that the codepage specified for in the Extractor/Accumulator settings in the Action or recall request.
61 (0x0000003D)	'Use default' codepage specified for archive or recall and there is no default UES `AMODE=` setting for the database. *Action:* Specify the codepage explicitly or configure the default `AMODE=` setting for the database.
62 (0x0000003E)	No Search record found. *Action:* Check that the correct Repository is being used and that the Search Record is still defined for the Action.
63 (0x0000003F)	Cannot search archive because the data was not archived in compressed format. *Action:* Contact your Software AG technical support representative.
64 (0x00000040)	Invalid search (search buffer). *Action:* Contact your Software AG technical support representative.
65 (0x00000041)	Invalid search (value buffer). *Action:* Contact your Software AG technical support representative.
66 (0x00000042)	Value buffer for search could not be converted from the UI codepage to the codepage of the archived data. *Action:* Contact your Software AG technical support representative.
67 (0x00000043)	'Use default' codepage specified for archive or recall and there is no default UES WMODE=setting for the database. *Action:* Specify the codepage explicitly or configure the default WMODE= setting for the database.
68 (0x00000044)	Task already locked. *Action:* Contact your Software AG technical support representative.
69 (0x00000045)	License file is missing.

Subcode	Meaning
	Action: Contact your Software AG technical support representative.
70 (0x00000046)	License key is invalid. *Action:* Contact your Software AG technical support representative.
71 (0x00000047)	License has expired. *Action:* Contact your Software AG technical support representative.
72 (0x00000048)	License is for a different operating system. *Action:* Contact your Software AG technical support representative.
73 (0x00000049)	License is for a different product. *Action:* Contact your Software AG technical support representative.
74 (0x0000004A)	License is for a different version. *Action:* Contact your Software AG technical support representative.
75 (0x0000004B)	Functionality restricted, Community edition. *Action:* License file required for full functionality.
76 (0x0000004C)	No license file found. *Action:* Contact your Software AG technical support representative.
77 (0x0000004D)	Duplicate archive identifier detected in the Vault. *Action:* Contact your Software AG technical support representative.
78 (0x0000004E)	Filename conflict detected in the Vault. *Action:* Contact your Software AG technical support representative.
79 (0x0000004F)	Some or all of the data for an archive is missing from the Vault. *Action:* Contact your Software AG technical support representative.
80 (0x00000050)	Vault or archive damaged. *Action:* Contact your Software AG technical support representative.
81 (0x00000051)	ADR plug-in library could not be loaded.

Subcode	Meaning
	Action: Contact your Software AG technical support representative.
82 (0x00000052)	Incompatible ADR plug-in library. *Action:* Contact your Software AG technical support representative.
83 (0x00000053)	Occurrence 'N' cannot be specified for a PE/MU LOB field in an Extractor Filter (Open Systems only). *Action:* Correct the format buffer in the Extractor Filter Settings.
84 (0x00000054)	An Extractor Filter must contain at least one non-LOB field. *Action:* Correct the format buffer in the Extractor Filter Settings.
85 (0x00000055)	The data being archived or recalled contains LOB fields but no LOB file number has been specified. *Action:* Specify a LOB file number, for recalls set in the recall settings and for archive set in the Accumulator settings in the Action.
86 (0x00000056)	License file does not provide the Price Units required by the system. *Action:* Contact your Software AG technical support representative.
87 (0x00000057)	License file does not provide the Price Quantity required by the system. *Action:* Contact your Software AG technical support representative.
88 (0x00000058)	License file does not provide Extended Rights. *Action:* Contact your Software AG technical support representative.
89 (0x00000059)	The file size of the archive file checked by the validation process is incorrect. *Action:* Restore the archive file from a backup and rerun the validation to check the integrity of the data.
90 (0x0000005A)	The number of records in the archive file checked by the validation process in incorrect. *Action:* Restore the archive file from a backup and rerun the validation to check the integrity of the data.
91 (0x0000005B)	The check sum for the archive file checked by the validation process is incorrect.

Subcode	Meaning
	Action: Restore the archive file from a backup and rerun the validation to check the integrity of the data.
92 (0x0000005C)	The lengths of the records in the archive file checked by the validation process are incorrect. *Action:* Restore the archive file from a backup and rerun the validation to check the integrity of the data.
93 (0x0000005D)	License file does not provide Archive to Vault required by the system. *Action:* Contact your Software AG technical support representative.
94 (0x0000005E)	License file does not provide Transfer to Adabas required by the system. *Action:* Contact your Software AG technical support representative.
95 (0x0000005F)	License file does not provide Delete from Adabas required by the system. *Action:* Contact your Software AG technical support representative.
96 (0x00000060)	Inconsistency in join data for archive. *Action:* Contact your Software AG technical support representative.
97 (0x00000061)	Inconsistent object/archive identifiers for archive. *Action:* Contact your Software AG technical support representative.
98 (0x00000062)	File list for action does not match the archive data. *Action:* Contact your Software AG technical support representative.
99 (0x00000063)	Archive identifier does not match API data. *Action:* Contact your Software AG technical support representative.
100 (0x00000064)	Group, plan or name of action does not match API data. *Action:* Contact your Software AG technical support representative.
101 (0x00000065)	File list for action does not match API data. *Action:* Contact your Software AG technical support representative.

Subcode	Meaning
102 (0x00000066)	Duplicate activity encountered. *Action:* Delete activity from Activities List and rerun.
103 (0x00000067)	Related file record is missing. *Action:* Contact your Software AG technical support representative.
104 (0x00000068)	Recall target record is missing. *Action:* Contact your Software AG technical support representative.
105 (x00000069)	Recall target information is not valid. *Action:* Contact your Software AG technical support representative.
106 (x0000006A)	Maximum number of related files exceeded. *Action:* Contact your Software AG technical support representative.
107 (x0000006B)	Maximum number of transfer destinations exceeded. *Action:* Contact your Software AG technical support representative.
108 (x0000006C)	Transfer destination not defined. *Action:* Contact your Software AG technical support representative.
109 (x0000006D)	Maximum number of related files or transfer destinations exceeded. *Action:* Contact your Software AG technical support representative.
110 (x0000006E)	Invalid related file. *Action:* Contact your Software AG technical support representative.
111 (x0000006F)	Invalid transger destination. *Action:* Contact your Software AG technical support representative.
112 (0x00000070)	Archive, recall or search failed. *Action:* Check the response and subcode for the Extractor/Accumulator in Completed Activities.
113 (0x00000071)	Archive, recall or search incomplete. *Action:* Records have been skipped due to contention or errors.

Subcode	Meaning
114 (0x00000072)	Invalid settings specified for file in action. *Action:* Contact your Software AG technical support representative.
115 (0x00000073)	Recall configuration records inconsistent. *Action:* Contact your Software AG technical support representative.
116 (0x00000074)	Recall configuration records inconsistent. *Action:* Contact your Software AG technical support representative.
117 (0x00000075)	API library is not installed. *Action:* Contact your Software AG technical support representative.
118 (0x00000076)	API library could not be loaded. *Action:* Contact your Software AG technical support representative.
119 (0x00000077)	Entry-point symbol missing from API library. *Action:* Contact your Software AG technical support representative.
120 (0x00000078)	Wrong version of API library. *Action:* Contact your Software AG technical support representative.
121 (0x00000079)	Fault detected in API library. *Action:* Contact your Software AG technical support representative.
122 (0x0000007A)	API library is missing. *Action:* Contact your Software AG technical support representative.
123 (0x0000007B)	No data returned by API. *Action:* Contact your Software AG technical support representative.
124 (0x0000007C)	Incorrect API parameters specified by user. *Action:* Contact your Software AG technical support representative.
125 (0x0000007D)	Memory allocation failed in API.

Subcode	Meaning
	Action: Contact your Software AG technical support representative.
126 (0x0000007E)	Internal API error. *Action:* Contact your Software AG technical support representative.
128 (0x00000080)	Incorrect parameter passed to API. *Action:* Contact your Software AG technical support representative.
129 (0x00000081)	API notification failed (state inconsistent). *Action:* Contact your Software AG technical support representative.
130 (0x00000082)	API library name is too long. *Action:* Reduce the length of the API library name.
131 (0xhhhh0083)	Error occurred while processing the Extraction Syntax. An extended error code (identified by hhhh) may also be reported for subcode 131. *Action:* Check the Extraction Syntax and if the error persists contact your Software AG technical support representative providing the full subcode value and the Extraction Syntax being used.
132 (0x00000084)	No dynamic extraction object code exists *Action:* Ensure that you have successfully saved and compiled your dynamic extraction syntax.
133 (0x00000085)	Duplicate Related file record with differing scopes. *Action:* Contact your Software AG technical support representative.
134 (0x00000086)	API To-Do list locked, it is already in use by another process. *Action:* Ensure that only one application/process accesses a To-Do list at any one time.
135 (0x00000087)	Extractor data targets do not match those in the Repository. *Action:* Contact your Software AG technical support representative.
136 (0x00000088)	Extractor/Accumulator was terminated unexpectedly or cancelled by the user.

Subcode	Meaning
	*Action:*Check the response and subcode for the Extractor/Accumulator in Pending, Current and Completed Activities.
137 (0x00000089)	Accumulator terminated because the Extractor is not active. *Action:*Check the response and subcode for the Extractor in Current Activities or Recently Completed.
138 (0x0000008A)	An archive activity could not be resumed/restarted because the FDT of one of the Source Files has been changed since the activity was paused/failed. *Action:* Contact your Software AG technical support representative.
139 (0x0000008B)	An archive activity could not be resumed/restarted because the Codepage setting for a Source File or the AMODE/WMODE settings for the associated database have been changed since the activity was paused/failed. *Action:* Contact your Software AG technical support representative.
140 (0x0000008C)	An archive activity could not be resumed/restarted because the Computer defined for the Extractor or Accumulator has been changed since the activity was paused/failed. *Action:* Contact your Software AG technical support representative.
141 (0x0000008D)	An archive activity could not be resumed/restarted because the Source or Target File definitions for the Action have been changed since the activity was paused/failed. *Action:* Contact your Software AG technical support representative.
142 (0x0000008E)	The Extractor was unable to read the FCB of one of the Source Files. *Action:* Contact your Software AG technical support representative.
143 (0x0000008F)	The FCB of the Source Files is in a format not recognised by the Extractor. *Action:* Contact your Software AG technical support representative.
144 (0x00000090)	An archive activity could not be resumed/restarted because one of the Source Files has been reloaded since the activity was paused/failed.

Subcode	Meaning
	Action: Contact your Software AG technical support representative.
145 (0x00000091)	An archive activity could not be restarted because the archive could not be validated, the repair was unsuccessful. *Action:* Review the meaning of any log messages written at the time of the failure and, if necessary, contact your Software AG technical support representative.
146 (0x00000092)	An archive activity could not be validated/restarted because one of the archive file segments is missing. *Action:* Contact your Software AG technical support representative.
147 (0x00000093)	Invalid archive identifier. *Action:* Contact your Software AG technical support representative.
148 (0x00000094)	Length mismatch detected whilst updating archive file record. *Action:* Contact your Software AG technical support representative.
149 (0x00000095)	No Vault record found. *Action:* Check that the Vault defined for the Plan or Action exists.
150 (0x00000096)	The ADR Service does not support the granularity setting configured for the Vault. *Action:* Contact your Software AG technical support representative.
151 (0x00000097)	Vault path does not exist. *Action:* Check that the Vault Path defined for the Extractor, Accumulator and ADR Service computers are correct.
152 (0x00000098)	An archive activity could not be validated/restarted because too many archive file segments exist. *Action:* Contact your Software AG technical support representative.
153 (0x00000099)	Timed-out whilst caching Vault content on local Computer. *Action:* Contact your Software AG technical support representative.
154 (0x0000009A)	Vault path does not exist. *Action:* Check that the Vault Path defined for the Extractor, Accumulator and ADR Service computers are correct.

Category 7 subcodes:

Subcode	Meaning
0xhhhh7004	An error has occurred whilst accessing a Vault where hhhh is the operating system error code. Refer to your operating system documentation for an explanation of hhhh (z/OS customers should refer to z/OS UNIX System Services Messages and Codes). If the cause of the error is not apparent, contact your Software AG technical support representative.
0xhhhh700B	An error has occurred whilst writing to a Vault where hhhh is the operating system error code. Refer to your operating system documentation for an explanation of hhhh (z/OS customers should refer to z/OS UNIX System Services Messages and Codes). If the cause of the error is not apparent, contact your Software AG technical support representative.

Category A subcodes:

Subcode	Meaning
0xhhhhA001	A TCP/IP error has occurred where hhhh is the operating system error code. Refer to your operating system documentation for an explanation of hhhh (z/OS customers should refer to z/OS UNIX System Services Messages and Codes). If the cause of the error is not apparent, contact your Software AG technical support representative.
0xhhhhA002	A DNS error has occurred where hhhh is the operating system error code. Refer to your operating system documentation for an explanation of hhhh (z/OS customers should refer to z/OS UNIX System Services Messages and Codes). If the cause of the error is not apparent, contact your Software AG technical support representative.

Response 249

Origin Mainframe and open systems

Explanation **Mainframe Systems**

Adabas Vista uses a default Adabas response code 249 for all processing errors. This response code can be changed by using the Job Parameter function of Adabas Vista Online Services.

The following table describes each of the subcodes possible for response code 249. Adabas Vista issues these subcodes as well to provide additional information.

Subcode	Meaning
1	The partitioned file concurrency limit has been reached. *Action:* Increase the partitioned file concurrency limit using the File Partitioning function of Adabas Vista Online Services.
6	The job parameter `Enable Multiple Updates` is set to NO. After updating one database, the user attempted to update a second database in the same transaction. *Action:* Review the job parameter `Enable Multiple Updates` in the Job Parameter function of Adabas Vista Online Services.
8	This partitioned file has been defined with an unsupported Partitioning Field. The Partitioning Field may not be: ■ A multiple value field ■ An item in a periodic group ■ A field with format F, G, or W ■ A variable length field ■ A field with the long alphanumeric (LA) attribute ■ A SUPDE or SUPFN of format Alphanumeric with at least one parent of format W *Action:* Review the partitioning criteria.
9	One of the following errors was detected while processing a partitioned file: ■ A distributed access can not be successfully processed due to the client encoding being incompatible with Vista's record collating process. ■ A command can not be successfully processed due to the client encoding being incompatible with the defined partition criteria. *Action:* Review the use of client encodings.
10	One of the following errors was detected in the Adabas search buffer while processing a partitioned file: ■ the specified field is not in the Adabas FDT.

Subcode	Meaning
	■ an S or N operator is used incorrectly. ■ a superdescriptor with a variable-length parent field is not allowed. ■ coupled file syntax is not allowed. ■ the value1 operator (EQ, GE, GT, etc.) is unknown. ■ a connecting operator (D, O, R, etc.) is unknown. ■ a command ID enclosed in parentheses is not allowed ■ a memory request failed. ■ collation descriptors are not supported. *Action:* Review and correct the application program.
12	Runtime controls have been changed dynamically without the client previously resetting all Adabas context to null. In this situation Vista is forced to discard all Adabas context and alert the application with this response. *Action:* Avoid this response by ensuring the client has no Adabas context prior to the runtime controls being changed.
14	One of the following errors was detected in the Adabas format or record buffer while processing a update/store for a partitioned file: ■ The partitioning field specified in the format buffer could not be located in the Adabas FDT (`N1` and `N2`). ■ An Adabas field specified in the format buffer could not be located in the Adabas FDT (`N1`, `N2` and `A1`). ■ The partitioning field value specified in the record buffer is inconsistent with the defined partitioning criteria for the file (`N1` and `N2`). ■ The partitioning field value specified in the record buffer is inconsistent with the partition criteria defined to the partition identified by the ISN in the Adabas control block (`N2` only). ■ The partitioning field value specified in the record buffer is null and the `Store Control Option` is set to 2 (`N1` only). ■ The partitioning field/value has not been specified and no target partition has been identified (`N1` and `N2`). *Action:* Review application program and partitioning criteria.
15	The partitioning field value specified in the record buffer of the `A1` command is inconsistent with the partition criteria defined to the partition identified by the ISN in the Adabas control block. Such an update requires the relocation of the ISN to another partition, which is not allowed.

Subcode	Meaning
	Action: Review the application program. Use a delete and store as an alternative.
16	An ISN has been detected that is invalid for one of the following reasons: ■ The partition identifier extracted from the Adabas Vista ISN is not consistent with any partition defined to the partitioned file. ■ The Adabas ISN read from a partition is greater than the TOPISN value defined for the partition. ■ An attempt to store a record has resulted in an Adabas ISN greater than the TOPISN value defined for the partition. ■ (Extreme partitioned files only) The number of partitions is greater than the limit of 255. ■ (Extreme partitioned files only) The application-supplied ISN is no longer associated with this partitioned file. *Action:* For Standard partitioned files, review the application program, the partition definitions, and check TOPISN setting. For Extreme partitioned files, review the application's use of the supplied ISN.
21	One of the following errors occurred while processing Distributed Lock Mode (DLM) against a partitioned file: ■ Prefetch/multifetch options on a distributed access `L6`command are not allowed for DLM options 2 and 3. ■ DLM option 4 is specified and a distributed access`S4` or `L6` command was issued. ■ DLM option 3 is specified and the distributed access data integrity check failed. *Action:* Review the application and use of the DLM option.
22	The client runtime control for `CL` convergence is set to reject when your Vista rules used during runtime result in activity for multiple source databases converging into a single target database. With this setting the `CL` command cannot be processed by Vista because it would result in the loss of cursor/transaction activity in the target database for source database(s) beyond the one indicated in this `CL` command which would result in unpredictable results and errors if those other source databases are used further. *Action:* Review the application program and the convergent translation/partitioning rules or alter the `CL` convergence runtime control setting.
25	One of the following unsupported commands has been issued: ■ an `S5` command (partitioned files only) ■ a `C5` command

Subcode	Meaning
	■ a BT command with Command Option 2 set to F (any transaction will have been backed out) ■ an L1 command with Command Option 1 or 2 set to F *Action:* Review application program.
28	An update command has been issued to a partitioned file; however, the target partition does not have the option ACCESS=FULL. *Action:* Review application program and partition ACCESS options.
31	An existing Command ID has been reused after the client's translation context has been modified but this now references a different file, which is an illegal situation and is therefore rejected. *Action:* Review programming practices for changing client contexts.
32	Partitioned files can not be subjected to a change in client context *Action:* Review programming practices for changing client contexts.
36	A session-related memory allocation failed during an inter-system dynamic transaction routing operation, the client session is unable to continue. This sub-code may not indicate an error on this current Adabas command, but it indicates that an internal error has prevented the Vista session continuing successfully. *Action:* Increase the shared memory available.
37	A file-related memory allocation failed during an inter-system dynamic transaction routing operation, the client session is unable to continue using the file. This sub-code may not indicate an error on this current Adabas command, but it indicates that an internal error has prevented the Vista session continuing successfully with one of the files currently being used so Vista is alerting you immediately. *Action:* Increase the shared memory available.
39	An L1 (get next) command was issued but the supplied command ID is not currently active. *Action:* Review application program.
45	An error has occurred during the processing of a distributed L3/L9 command against a partitioned file. *Action:* Contact your Software AG technical support representative and use the COR Debug Event Monitor controls specifying Response 249 and this subcode to provide diagnostic information.
50	An A1 command was issued without the H option and the DLM option is set to 1. However, the ISN to be updated has not been previously read by a hold command.

Subcode	Meaning
	Action: Review application program and use of DLM option.
51	The number of segmented buffers used by this ACBX call against a Partitioned File is greater than the maximum allowed. *Action:* Reduce the number of segmented buffers.
52	The file parameter `Enable ISN Positioning` is set to NO and one of the following commands was issued: ■ `L1` with Command Option 2 set to I ■ `L2/5` with starting ISN ■ `L3/6` with starting ISN ■ `Sx` with the ISN Lower Limit field specified *Action:* Review application program and the file parameter `Enable ISN Positioning`.
60	A memory request failed. *Action:* Review the memory availability of the ■ host TP system; ■ host operating system; and ■ global common memory pool (BS2000 only; specified in the Adabas System Coordinator group definition).
65	One of the following invalid values was used for a command ID value: ■ X'00000000' ■ X'40404040' *Action:* Do not use the above command ID values.
70	Support for the use of this API has been withdrawn. *Action:* Please refer to the currently supported APIs or, alternatively, contact your Software AG technical support representative to discuss your requirements.
72	An ET Data related command has been issued, but the runtime control (see *Database Number for ET Data*, in the *Adabas Vista Parameters* manual) is not set to a specific database number and Vista has been unable to establish a target database to satisfy the command. *Action:* Review the runtime control *Database Number for ET Data*, in the *Adabas Vista Parameters* manual, to specifically identify the database number to be used.

Subcode	Meaning
74	A sequence direction change has been detected during an L3 or L9 command against a Partitioned File whose Command ID sequence has been previously subjected to multifetch. *Action:* Review the program logic.
81	An error has occurred during the processing of an L1 'get next' command against a partitioned file. *Action:* Contact your Software AG technical support representative and use the COR Debug Event Monitor controls specifying Response 249 and this subcode to provide diagnostic information.
86	The Adabas Vista database process is not installed. It must be installed on all Adabas databases which contain Adabas Vista partitions. This subcode indicates that a database ■ is not running with ADARUN VISTA=YES; or ■ is not running Adabas version 7 or above. *Action:* Refer to the Adabas Vista installation procedures.
96	An error has occurred during the parsing of the Format Buffer during the processing of an Ax or Nx command against a partitioned file. *Action:* Contact your Software AG technical support representative and use the COR Debug Event Monitor controls specifying Response 249 and this subcode to provide diagnostic information.
106	The configuration for the first-level null definition policy for this target category (mode) is set to reject "null" as the outcome of translation processing. *Action:* Review the null definition policy for the target category (mode) used if you do not wish to receive this error.
107	Translation processing has been configured to disallow redirection to a different target category (mode). *Action:* Remove the redirection rule(s) or review the category adjustment policy for the target category (mode) in use.
108	The configuration for the first-level null definition policy redirects to another target category (mode) which in turn has resulted in a "null" outcome. The second-level null definition policy is set to reject such an outcome. *Action:* Review the translation rules in use to avoid a null result or alter the null definition policies.
109	Translation processing has detected a recursive redirection. *Action:* Review the translation rules in use.
112	An error has occurred during the processing of the current command.

Subcode	Meaning
	Action: Contact your Software AG technical support representative and use the COR Debug Event Monitor controls specifying Response 249 and this subcode to provide diagnostic information.
116	A command has been issued against a partitioned file which has the `Shared Partition` option set to YES for one or more of its partitions. However, the partitioning field defined does not exist in the Adabas FDT. *Action:* Contact your Software AG technical support representative and use the COR Debug Event Monitor controls specifying Response 249 and this subcode to provide diagnostic information.
117	One of the following errors occurred while processing the record, value, or search buffer: ■ A P format field value was not in packed decimal format. ■ A U format field value was not in unpacked decimal format. ■ The attempted format conversion was not possible because of incompatible data formats or other compatibility problems. ■ The field length was zero or not consistent with the field format. *Action:* Check field values for correct formats and lengths.
119	One of the following has occurred: ■ Runtime configuration on behalf of this client was unsuccessful and Adabas Vista has been defined as "critical" using the Critical Product Support feature of the Adabas System Coordinator. ■ The Adabas Vista configuration file was not available during an attempt to satisfy an Adabas Vista API request. *Action:* Check the availability of the configuration file. If the client runtime control Error Reporting WTO option is set to YES, this error may be accompanied by an AVI-0017-10 console message.
120	The client previously issued a command to a source file for which Vista was unable to determine the existence of any translation rules due to the configuration file not being available at the time. Subsequently, Vista has detected the availability of the configuration file and has determined the existence of a transation rule for this source file. This subcode is returned the next time the client attempts to access the source file. *Action:* Review the availability of the configuration file.
122	An invalid partitioned file definition has been found in the Adabas Vista configuration file. *Action:* Check the file definition using Adabas Vista Online Services.
123	An invalid translation rule has been found in the Adabas Vista configuration file.

Subcode	Meaning
	Action: Check the rule using Adabas Vista Online Services.
124	An error in the record buffer was detected during processing of an OP command.
126	One of the following errors occurred while processing an S8 command: ■ An invalid command ID was specified in the Additions 1 field. ■ Different file numbers were detected for ISN lists. ■ An error occurred while processing a subsequent S8 call. *Action:* Review the application program.
127	One of the following errors occurred while processing an S2 command: ■ An invalid sort sequence was specified. ■ An invalid ISN was detected during processing. ■ An error was detected during ISN processing. *Action:* Review the application program.
128	One of the following errors occurred while processing an S9 command: ■ The command ID value specified was assigned to another command. ■ An invalid sort sequence was specified. ■ An invalid ISN buffer length was detected. ■ The number of ISNs to be sorted as provided in ISN quantity is equal to 0. ■ The command ID value specified in Additions 4 was not found. ■ An invalid ISN was detected during processing. ■ An error was detected during ISN processing. *Action:* Review the application program.
129	The command limit defined for this source file has been exceeded. *Action:* Review the command limit.
131	A requested file refresh of a partitioned file has failed due to an unexpected Adabas response code. The partitioned file is in a partially refreshed state. *Action:* Review the Adabas response code.
133	One of the following errors occurred whilst processing a direction change during an L9 command sequence: ■ A second direction change for this sequence was attempted. ■ A format override cannot be processed. ■ A length override greater than specified in the FDT cannot be processed.

Subcode	Meaning
	■ A length override has been specified with complex search criteria. *Action:* Review the use of the L9 command and the Adabas Vista restrictions.
134	An S2 command to continue a sequence has been received. The sequence was not started by an S2 command. *Action:* Amend the command sequence to process either all S1 commands, or all S2commands, as appropriate.
200	ISN quantity is too high on this Sx command. *Action:* Perform a more specific Sx .
201	One of the following errors occurred while initializing AVIKRN: ■ The dynamic load failed. ■ The version is not compatible. *Action:* Check the Adabas Vista installation procedures.
250	ISN error when issuing ACBX style RI shared-hold calls with ACBXCOP3 set to "S". *Action:* Check ISN usage on shared-hold commands.
305	An error has occurred while attempting to access an Extreme partitioned file. *Action:* Contact your Software AG technical support representative and use the COR Debug Event Monitor controls specifying Response 249 and this subcode to provide diagnostic information.
496	The session is not compliant with correct distributed transaction processing. Read *Transaction Directives*, in *Adabas Vista Programming Guidelines* for a more detailed explanation of this subcode. *Action:* Adhere to correct distributed transaction processing.
532	This session has not complied with the correct transactional processing behavior when using the discrete file setting. *Action:* Review the discrete file setting and ensure correct transactional processing.
588	For ACBX calls, a conflict with shared hold status option "H" has been detected. The client session is using this option in a conflicting manner during an ET or BT sequence after a commit/backout process has been performed. The transaction outcome is unaffected but records may no longer be in shared hold status. *Action:* Review usage of this option.

Open Systems

In Adabas Vista (open systems) an error occurred during command execution. One of the following subcodes may occur:

Subcode	Meaning
1 (0x0001)	An inconsistency in an internal data structure was detected. This may indicate a code fault within Adabas Vista. *Action:* Contact your Software AG technical support representative.
2 (0x0002)	An inconsistency in an internal data structure was detected. This may indicate a logic error within Adabas Vista. *Action:* Contact your Software AG technical support representative.
3 (0x0003)	The `S9` command is not supported on partitioned files. *Action:* Review the program logic.
4 (0x0004)	The F option for an `L1` command is not supported on partitioned files *Action:* Review the program logic.
5 (0x0005)	The F option for a `BT` command is not supported. *Action:* Review the program logic.
6 (0x0006)	The ISN buffer for a `BT` or `ET` command with the M option is not consistent with ISN Buffer Length in the Adabas control block. *Action:* Review the program logic.
7 (0x0007)	The maximum number of active command ID values has been reached. *Action:* Review the program logic.
8 (0x0008)	The command ID value specified for `TBLES/TBQ` (sequential) or `TBI` (ISN list) command is already in use by a different `TBLES/TBQ` or `TBI` command. *Action:* Review the program logic.
9 (0x0009)	Adabas Vista is not compatible with the installed version of Natural, Adabas or Entire Net-Work. *Action:* Contact your Software AG technical support representative.
10 (0x000A)	The definitions for partitioned file do not exist. *Action:* Review the partition definitions in SYSAVI.
11 (0x000B)	The parititioning field does not exist in the FDT. *Action:* Review the partition definitions in SYSAVI.

Subcode	Meaning
12 (0x000C)	The field type in the partition definition does not match the field type in the FDT. *Action:* Review the partition definitions in SYSAVI.
13 (0x000D)	The type for the parititioning field is not suitable. *Action:* Review the partition definitions in SYSAVI.
14 (0x000E)	The format buffer specified for an `N1` or `N2` command does not contain the partitioning field. *Action:* Review the program logic.
15 (0x000F)	The value of the partitioning field in the record buffer specified for an `N1` or `N2` command could not be converted to the standard field length and format. *Action:* Review the program logic.
16 (0x0010)	The value of the partitioning field in the record buffer specified for an `A1`, `N1` or `N2` command does not correspond to any partition defined for the file. *Action:* Review the partition definitions in SYSAVI.
17 (0x00011)	The value of the partitioning field in the record buffer specified for an `A1` command would require the ISN to be relocated to a different partition. *Action:* Review the program logic.
18 (0x00012)	The ISN and the value of the partitioning field in the record buffer specified for an `N2` command do not correspond to the same partition. *Action:* Review the program logic.
19 (0x00013)	The license is not valid for this operating system. *Action:* Contact your Software AG technical support representative.
20 (0x00014)	The license has expired. *Action:* Contact your Software AG technical support representative.
21 (0x00015)	The license file could not be found. *Action:* Contact your Software AG technical support representative.
22 (0x00016)	The license key is invalid. *Action:* Contact your Software AG technical support representative.
23 (0x00017)	The license is for a different version of the product. *Action:* Contact your Software AG technical support representative.

Subcode	Meaning
24 (0x00018)	The license is not for this product. *Action:* Contact your Software AG technical support representative.
25 (0x00019)	The ISN of a record read from a partition or the ISN of a record stored using an `N1` command is too large. *Action:* Check the settings for the Adabas file to ensure that the ISN values cannot exceed the highest value defined for the partition in SYSAVI.

Response 250

Origin Mainframe and open systems

Explanation On mainframe systems, the ACBX (ACBX) failed validation. The following subcodes are possible:

Subcode	Meaning
1	Unsupported ACBX version
2	ADACBX provided without UBE.
3	ACBX file number > 65,535.
4	Reserved field not zero.
5	ACBX length incorrect

On open systems, a requested function is not yet implemented.

Action On mainframe systems, if subcode 3 occurs, notify your Software AG technical support representative. If any of the other subcodes occur, correct the ACBX specification and rerun.

On open systems, wait for a later version of Adabas.

Response 251

Origin Mainframe and open systems

Explanation On mainframe systems, an error occurred in Adabas cluster processing. Under certain conditions, the Adabas cluster SVC (SVCCLU) component of the ADASVC returns response code 251 in the ACB's response code field, along with a hexadecimal subcode (listed below in decimal) in the low-order (rightmost) two bytes of the Additions 2 field. In the case of an ACBX, the ADASVC returns response code 251 in the ACBX's Response Code (ACBXRSP) field and the subcode in the Error Subcode (ACBXERRC) field.

- If the local SVCCLU detects the condition, the subcode will range from 2 through 30.

- If a remote SVCCLU detects the condition, it will range from 102 through 130.

Note: If you are running with Entire Net-Work, the leftmost two bytes of the Additions 2 field (in the ACB) or the ACBXERRC field (in the ACBX) may contain the ID of the Entire Net-Work node that issued this response code.

Subcode	Meaning
2	The remote cluster nucleus to which the user is assigned cannot be accessed.
4	There are no user table entries (UTEs) available for use.
5	Internal error. The nucleus specified by an internal command was not found.
7	Internal error. The user was assigned to a remote nucleus by the local system but the remote system found that the nucleus was not active.
9	Internal error. The 28-byte user ID is all zeros.
17	Entire Net-Work is not active.
19	Internal error. Invalid internal command code.
20	Remote nuclei are active; command must be assigned remotely but the remote nuclei are not accepting commands.
21	The remote image to which the user is assigned has no usable nuclei.
22	An attempt was made to assign a user remotely but Entire Net-Work is not active.
25	No system image target
26	System image target changed
27	Internal error.
28	Version mismatch between the PLXCB and the SVCCLU part of the ADASVC.
29	Probably, you used a NUCID value from a restricted range. Otherwise, this is an internal error. *Action:* Ensure that the NUCID assignments are valid.
30	More than 32 NUCIDs were detected for the same SVC/DBID combination. *Action:* Reduce the number of NUCIDs on the SVC/DBID to 32.
41	An invalid PLXCB dataspace ALET was detected during command initiation. The PLXCB is unusable. The ALET has been removed from the IDTH prefix.
45	An invalid PLXCB dataspace ALET was detected during command completion. The PLXCB is unusable. The ALET has been removed from the IDTH prefix.
43	An invalid PLXCB dataspace header was detected. The PLXCB is unusable. The ALET has been removed from the IDTH prefix.
44	A program check occurred while using the PLXCB dataspace ALET. The PLXCB is unusable. The ALET has been removed from the IDTH prefix. Under z/OS a software LOGREC (EREP) record was created.

Subcode	Meaning
51	All open nuclei on this node have reached the maximum number of users and are not accepting additional new users.

On open systems, an invalid utility call - versions conflict occurred.

Action

For internal errors on mainframe systems, contact your Software AG technical support representative. For all other mainframe errors except as noted, contact your systems administrator.

On open systems, check whether the utilities and database nuclei are of the same version. Contact your Software AG technical support representative for assistance.

Response 252

Origin

Mainframe and open systems

Explanation

On mainframe systems, an error occurred during Adabas SVC processing (post error).

Note: If you are running with Entire Net-Work, the leftmost two bytes of the Additions 2 field (in the ACB) or the ACBXERRC field (in the ACBX) may contain the ID of the Entire Net-Work node that issued this response code.

On open systems, an invalid subroutine call - coding error occurred. This response may also be returned on setting the Entire Net-Work timeout via Adaset Timeout if Entire Net-Work is not correctly installed.

Action

For open systems, contact your Software AG technical support representative.

Response 253

Origin

Mainframe and open systems

Explanation

On mainframe systems, an error occurred processing a buffer.

Note: If you are running with Entire Net-Work, the leftmost two bytes of the Additions 2 field (in the ACB) or the ACBXERRC field (in the ACBX) may contain the ID of the Entire Net-Work node that issued this response code.

The following subcodes are possible:

Subcode	Meaning
0	Buffer length 0 (ACB user only)
1	Format buffer address zero
2	Record buffer address zero
3	Search buffer address zero
4	Value buffer address zero
5	ISN buffer address zero
6	User information buffer address zero

Subcode	Meaning
7	Performance buffer address zero
8	Multifetch buffer address zero
9	Unsupported ABD buffer type
10	Attached buffer overrun
11	Unsupported ABD version
12	ACBX not accepted by target
13	Unable to convert ACBX to ACB
14	ALET value not permitted
15	Unable to process 64-bit buffer address
16	Invalid buffer location indicator
17	Logic error locating ABD
18	More than 65,535 ABDs of any single type.
19	Reserved field not zero
20	ADABDX length incorrect
1xx	An error occurred attempting to allocate a Pause Element. The subcode is 100 (decimal) added to the return code from the z/OS IEAVAPE service. *Action:* Refer to IBM z/OS documentation for IEAVAPE for an explanation of its return code. Contact your Software AG support representative for assistance.
2xx	An error occurred attempting to pause using a Pause Element. The subcode is 200 (decimal) added to the return code from the z/OS IEAVPSE service. *Action:* Refer to IBM z/OS documentation for IEAVPSE for an explanation of its return code. Contact your Software AG support representative for assistance.

On open systems, the system file is not loaded or inconsistent.

Action

For mainframe systems, subcodes 10 and 17 are internal logic errors; notify your Software AG support representative. For all other subcodes, correct the buffer specification error and rerun.

On open systems, check the system files by running ADAVFY.

Response 254

Origin

Mainframe systems only

Explanation

A validation error occurred during command completion processing while attempting to return results to the caller.

One of the following has occurred:

- An internal error occurred during processing of an attached buffer (buffer overflow)

- The CT parameter limit was exceeded. Message ADAM93 (or a similar message) is printed or displayed on the console.

  If the CT parameter limit was exceeded, the nucleus terminated the user, generated the equivalent of a BT command internally, released the CQE and attached buffer space, and issued ADAM93 (or a similar message).

  If the user was not terminated, the subcode in the right-most two bytes of the ACB's Additions 2 field or the subcode in the ACBX's Error Subcode (ACBXERRC) field describes the failed validity check.
- If you are running with Entire System Server, the TIME parameter limit was exceeded. Message ADAM93 (or a similar message) displays on the console.

Note: If you are running with Entire Net-Work, the leftmost two bytes of the Additions 2 field (in the ACB) or the ACBXERRC field (in the ACBX) may contain the ID of the Entire Net-Work node that issued this response code.

Subcode	Meaning
1	UBCQEX is less than or equal to zero
2	UBCQEX is greater than CQHNCQES
3	CQEFLAG is not equal to CQEFAB plus CQEFW16
4	CQEAUB is not equal to A'UB
5	CQEAUPL is not equal to A'APL
6	The low-order 6 bytes of CQECKSUM does not equal UBCKSUM
7	CQE was timed out
8	An inconsistency in the CQE such as the following: ■ The CQE was unexpectedly taken by another call . ■ The user buffer (UB) is not receiving expected user information. ■ The target move data length is inconsistent.
9	Record buffer overflow
10	ISN buffer overflow
11	Inconsistent format buffer length
12	Inconsistent search buffer length
13	Inconsistent value buffer length
14	Inconsistent user buffer length
15	Invalid attached buffer ABD index (internal logic error)
16	Buffer overflow; see ACBXERRD and ACBXERRE

Action

Ensure that the caller's control structures and parameters are not altered while the command is being processed. If you are unable to resolve the error, notify your Software AG support representative.

Response 255

Origin Mainframe and open systems

Explanation On mainframe systems, all attached buffers were allocated at the time the command was processed. Buffer allocation "high water marks" may not reflect this condition when no buffer allocation occurs.

Note: A Response 255 may also be issued by Entire Net-Work and in these circumstances the leftmost two bytes of the Additions 2 field (in the ACB) or the ACBXERRC field (in the ACBX) may contain the ID of the Entire Net-Work node that issued this response code.

On open systems, the Adabas command could not be processed because not enough Adabas nucleus or operating system resources are available. The value in the first two bytes of the Additions 2 field indicates the reason (2-byte binary format).

Action On open systems, perform the following actions, based on the subcode:

Subcode	Action
1	No space is available for the attached buffers. Increase the LAB (length of attached buffers) parameter.
2	No space is available in the client ID table. Increase the NCL (number of client threads) parameter.
3	Message queue generation failed. Increase the corresponding operating system parameters (please refer to the Adabas open systems installation documentation for further information).
4-6	An internal error occurred; an unexpected response code was received from a system function. Contact your Software AG technical support representative.
7 (only with ADALNKX)	The ADAMPLNK executable could not be loaded. Make this module available.
8	No space is available for extended attached buffers. Increase the value of the LABX (length of extended attached buffers) parameter.

10 Adabas Checkpoints

Checkpoint names starting with "SYN"" are reserved for the Adabas nucleus and utilities, as described in:

- SYNC -- A synchronized checkpoint made during nucleus initialization, including the status of the ADARUN IGNDIB and FORCE parameters.
- SYNF -- A checkpoint taken by a user program or utility that requires exclusive (EXF) control of one or more files.
- SYNP -- A checkpoint from a utility that requires privileged control. Such a utility can perform updating without using the Adabas nucleus.
- SYNS (mainframe only) -- A checkpoint from Adabas Online System (SYSAOS), ADADBS, or the nucleus. The table below identifies the source. The function identified by this checkpoint is implemented without user intervention during regeneration.

  Exceptions include a second SYNS 5B recorded at the end of a nucleus session, SYNS 60 recorded at an interval specified by the ADARUN INTNAS parameter, and SYNS 61 recorded when more space is allocated for a file.
- SYNV (mainframe only) -- Indicates that a volume ID changed during sequential write to a data set is being closed.
- SYNX -- A checkpoint from a utility requiring exclusive control (EXU) of one or more files.
- SYN1 (mainframe only) -- A checkpoint made at the beginning of online ADASAV execution (SAVE database function).
- SYN2 (mainframe only) -- A checkpoint made at the end of online ADASAV execution (SAVE database function).
- SYN4 (mainframe only) -- A checkpoint made at the beginning of online ADASAV execution (SAVE files operation).
- SYN5 (mainframe only) -- A checkpoint made at the end of online ADASAV execution (SAVE files operation).

The following table describes the checkpoints written by the Adabas nucleus or utilities:

Type	Name	Originator	Description
01	SYNC	ADANUC	Written by nucleus at start of nucleus session.
01	SYNF	User/Utility	User/utility session OPEN with files used in EXF (exclusive use) mode.
01	SYNS	ADANUC	Written by the starting of a second or subsequent Parallel Services or Cluster Services nucleus.
01	SYNX	EXU user	EXU user open.
02	SYNV	ADANUC	VOLSER entry. Written at volume switch on DD/SIBA and at the end of the session if sequential logging is used.
03	SYNF	User/Utility	Close checkpoint for an EXF user.
03	SYNX	EXU	Close checkpoint for an EXU user.
05	SYN4	ADASAV	SAVE file(s)-start of operation with nucleus active.
05	SYN5	ADASAV	SAVE file(s)-end of operation with nucleus active.
05	SYNP	ADASAV	SAVE file(s)-start of operation
06	SYN1	ADASAV	SAVE database-start of operation with nucleus active.
06	SYN2	ADASAV	SAVE database-end of operation with nucleus active.
06	SYNP	ADASAV	SAVE database-start of operation
07	SYNP	ADASAV	RESTORE file(s)-end of operation
08	SYNP	ADASAV	RESTPLOG-end of operation
09	SYNV	ADASAV	SAVE file(s), VOLSER entry. Written at volume change on DD/SAVE and at SAVE-operation end.
0A	SYNV	ADASAV	SAVE database, VOLSER entry. Written at volume switch on DD/SAVE and at SAVE-operation end.
0B	SYN1	ADASAV	SAVE DELTA-start of operation with nucleus active
0B	SYN2	ADASAV	SAVE DELTA-end of operation with nucleus active
0B	SYNP	ADASAV	SAVE DELTA-end of operation
0C	SYNP	ADASAV	RESTORE DELTA-end of operation
0D	SYNP	ADASAV	MERGE-end of operation
0E	SYNV	ADASAV	SAVE DELTA, VOLSER entry
0F	SYNV	ADASAV	MERGE, VOLSER entry
10	SYNP	ADAINV	COUPLE files
11	SYNP	ADAINV	INVERT field(s)
15	SYNP	ADAORD	REORDER Associator database
16	SYNP	ADAORD	REORDER Data Storage database
17	SYNP	ADAORD	REORDER database
18	SYNP	ADAORD	REORDER Associator file
19	SYNP	ADAORD	REORDER Data Storage file

Type	Name	Originator	Description
1A	SYNP	ADAORD	REORDER file
1B	SYNP	ADAORD	STORE
1C	SYNP	ADAORD	RESTRUCTURE
1D	SYNP	ADADEF	DEFINE NEWWORK
1E	SYNP	ADADEF	MODIFY (default character encodings, timezone)
22	SYNX	ADARES	REGENERATE file
23	SYNX	ADARES	BACKOUT file
24	SYNX	ADARES	REGENERATE all; CPEXLIST lists excluded files
25	SYNX	ADARES	BACKOUT all; CPEXLIST lists excluded files
26	SYNP	ADARES	REPAIR Data Storage
27	SYNP	ADARES	COPY function sucessfully completed
27	SYNV	ADARES	COPY sequential protection log
28	SYNP	ADARES	PLCOPY function successfully completed
28	SYNV	ADARES	PLCOPY dual or multiple protection log
29	SYNP	ADARES	ADARES CLCOPY function successfully completed.
29	SYNV	ADARES	CLCOPY dual or multiple command log
2A	SYNP	ADARES	PLCOPY MERGE function successfully completed
2A	SYNV	ADARES	PLCOPY MERGE dual or multiple protection log
2B	SYNP	ADARES	CLOG MERGE function successfully completed
2B	SYNV	ADARES	CLOG MERGE dual or multiple command log
30	SYNP	ADALOD	LOAD file
31	SYNP	ADALOD	Mass update
35	SYNX	ADAULD	Unload file
3F	SYNP	ADAZAP	Successful VERIFY - REPLACE
40	SYNS	SYSAOS	Add extent
41	SYNS	SYSAOS	CHANGE default field length
42	SYNS	SYSAOS	DECREASE database size
44	SYNS	SYSAOS	Delete file
45	SYNS	SYSAOS	INCREASE database size
47	SYNS	SYSAOS	RECOVER space
48	SYNS	SYSAOS	Refresh file
49	SYNS	SYSAOS	Remove component file from expanded-file chain
4A	SYNS	SYSAOS	Release descriptor
4B	SYNS	SYSAOS	RENAME file
4C	SYNS	SYSAOS	RENUMBER file
4D	SYNS	SYSAOS	RESET DIB

Type	Name	Originator	Description
4E	SYNS	SYSAOS	Reuse ISN
4F	SYNS	SYSAOS	Reuse Data Storage
50	SYNS	SYSAOS	UNCOUPLE files
51	SYNS	SYSAOS	ALLOCATE file extent
52	SYNS	SYSAOS	DEALLOCATE file extent
53	SYNS	SYSAOS	Delete checkpoint
54	SYNS	SYSAOS	Set user priority
55	SYNS	SYSAOS	Modify FCB
57	SYNS	SYSAOS	DEFINE file
58	SYNS	SYSAOS	Write FDT
59	SYNS	SYSAOS	DEFINE new field
5B	SYNS	ADADBS	Write refreshed statistics (some or all per user request)
5B	SYNS	ADANUC	Write (all) statistics at end of nucleus session
5C	SYNS	SYSAOS	CHANGE default field format
5D	SYNS	SYSAOS	Change file encoding
5E	SYNS	ADADBS	ADADBS REPTOR function (refer to your Event Replicator for Adabas documentation)
60	SYNS	ADANUC	Nucleus statistic checkpoint
61	SYNS	ADANUC	Allocate file space
64	SYNS	ADASCR	Protect files
65	SYNS	ADASCR	Protect fields
66	SYNS	SYSAOS	Link component file into expanded-file chain
67	SYNS	NUCLEUS	Session start with IGNDIB=YES
68	SYNS	SYSAOS	Set USERISN on/off
69	SYNS	SYSAOS	Set MIXDSDEV on/off
6A	SYNS	SYSAOS	Install Delta Save DLOG area
6B	SYNS	SYSAOS	Change Delta Save DLOG area
6C	SYNS	SYSAOS	Remove Delta Save DLOG area
6D	SYNS	ADANUC	NUC-ZAP was used
6E	SYNS	ADADBS	ADADBS REPLICATION function (refer to your Event Replicator for Adabas documentation)
6F	SYNS	SYSAOS	Online process initiated
70	SYNS	SYSAOS	Online invert process
71	SYNS	SYSAOS	Online reorder process
73	SYNC	ADANUC	Nucleus (nuclei) successfully quiesced.
74	SYNC	ADANUC	Nucleus (nuclei) have resumed normal processing.
75	SYNS	ADANUC	Delete heuri-user-entry after Response 72 was detected during nucleus startup.

Type	Name	Originator	Description
76	SYNS	ADANUC	Delete heuri-user-entry after Response 72 was detected during nucleus session.
77	SYNS	ADADBS	Enable spanned record support.
78	SYNS	ADADBS	Enable or disable extended MU or PE fields
7A	SYNS	ADADBS	Delete field from the FDT
7B	SYNS	ADANUC	Logically delete a descriptor
7C	SYNS	SYSAOS	Set file status: READONLY mode
7D	SYNS	ADADBS	Add or delete CLOG
7E	SYNS	ADADBS	Add or delete PLOG
7F	SYNS	ADANUC	Change fields
81	SYNS	ADANUC	Modify FCB
82	SYNS	ADANUC	Online add or increase of an ASSO or DATA data set
83	SYNS	ADANUC	Autoincrease of an ASSO or DATA data set
84	SYNS	SYSAOS	AOSLOG information with user ID
85	SYNS	ADADBS	ADADBS AUDITING function
86	SYNS	ADADBS	ADADBS AUDITSERVER function

11 Adabas Command Log Layouts

Command log layout 8 comprises the following log record types:

- the basic log record type (x'0001') is produced for all commands processed on noncluster nuclei and for those that arrive from a remote nucleus and run under internal command queue elements (ICQEs).
- the asynchronous request log record type (x'0002') is created on a nucleus that sends a command to another nucleus. This record type is used in Adabas nucleus cluster environments only.
- the Adabas event log record type (x'000D') is produced for commands that received response code 145 (ADARSP145).

The DSECT that maps the layout of the CLOGLAYOUT=8 records is called LORECX and can be found in the ADA*vrs*.SRCE library.