9 software AG

Adabas Vista

Parameters

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Adabas Vista



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1 Parameters

This document describes the parameters and client runtime controls which are used to control Adabas Vista processing. These parameters and controls are defined and maintained using Adabas Vista Online Services.

- **■** Adabas Vista Parameters
- Adabas Vista Client Runtime Controls

2 Adabas Vista Parameters

■ General	Δ.
Partitioning Parameters	
Translation Parameters	
Target Category Parameters	

This section describes the Adabas Vista parameters.

General Parameters	3	File Translation Parameters	Target Category Parameters
Command Limit	Access	Target Database Number	First-level Null Definition Policy
Source Database Number	Adabas TOPISN	Target File Number	Category Adjustment Policy
Source File Number	Critical	Mandatory	Second-level Null Definition Policy
Source Name	Enable ISN Positioning	Priority	
	Maximum Number Partitions	Redirect	
	Partition Database Number	No Translation	
	Partition File Number	User Info	
	Partition ID		
	Partition ID Assignment		
	Partitioning Field		
	Partitioning Field High Value		
	Shared Partition		
	Store Control Option		
	User Partition Concurrency		

General

Command Limit

Description	Possible Values	Default
The maximun number of commands permitted against a source file. Any command that exceeds this number will result in an error code. The default value 0 indicates no limit.		0

Source Database Number

Description	Minimum	Maximum	Default
The number of a database which identifies an Adabas Vista file. This number is used in conjunction with a source file number.	1	65535	0
Note: In Natural systems, this is the database number defined in a DDM.			

Source File Number

Description	Minimum	Maximum	Default
The file number for an Adabas Vista file. This number is used in conjunction with a source database number.	1	65535	0
Note: In Natural systems, this is the file number defined in a DDM.			

Source Name

Description	Possible Values	Default
A unique name identifying a particular Adabas Vista file without referring to the source database and file number. The name must be unique across all published partitioned file definitions. The name must also be unique across all published translation rules.		none
(optional)		

Partitioning Parameters

Access

Description	Possible Values	Default
Controls the type of access for each partition of a partitioned file.	FULL READ ONLY	FULL
The following values are permitted:	NONE	
■ FULL: read/write access is permitted		
■ READ: read-only access is permitted		
ONLY: single partition focus is enabled for the partition		
Note: single partition focus may not be used in conjunction with a shared partition.		

Description	Possible Values	Default
■ NONE: no access is permitted		
See section Partition Restriction for more information.		

Adabas TOPISN

Description	Minimum	Maximum	Default
The maximum Adabas ISN permitted for a partition.	1	2,147,483,647	16,777,215
Adabas Vista enforces the specified maximum during read and store processing.			
The initial maximum is determined by the Maximum Number of Partitions / Default Partition TOPISN, established when the partitioned file is first defined.			
This parameter may be used to provide a lower value in order to maintain specific partition sizes that may have been derived from recovery and maintenance considerations.			
Note: The Adabas TOPISN value is a limit on the maximum ISN for a			
partition and not the maximum number of records.			

Critical

Description	Possible Values	Default
Indicates the action to be taken whenever a partition becomes unavailable.	YES NO	YES
Possible values are:		
■ YES: the user cannot tolerate the partition's unavailability. Normal user operation is interrupted when access is attempted (with the corresponding Adabas response code).		
■ NO: the user can tolerate the partition's unavailability. Data in that partition is ignored until the partition becomes available again. The partitions that return one of the partition unavailable response codes (17, 48, 148) when accessed are logged and can subsequently be identified using the CRITREP function of the Adabas Vista API.		
See section Partition Outage for more information.		

Enable ISN Positioning

Description	Possible Values	Default
Indicates whether or not ISN positioning is to be used when an Adabas Vista ISN is provided as an optional start ISN for L2/5 and L3/6 commands or as a minimum ISN value for Sx commands.	YES NO	YES
If an L1 command with Command Option 2 set to I is issued with a starting Adabas Vista ISN of zero and this parameter is set to YES, reading begins from the first partition.		

Maximum Number of Partitions (Default Partition TOPISN)

Description	Minimum	Maximum	Default
The maximum number of partitions available for use by a partitioned file.	1	65535	255
Only those partitions relevant to current processing requirements need to be defined. However, the future requirements of the partitioned file must also be considered when determining the value for this parameter.			
Because of the structure of the Adabas Vista ISN, this parameter directly affects			
the amount of space reserved in the ISN field for the Partition ID; and			
the default Adabas TOPISN for each partition.			
The default Adabas TOPISN imposed by this parameter is calculated and displayed in order to help determine the correct balance between the maximum number of partitions and the resulting Adabas TOPISN partition limit.			

Partitioning Field

Description	Possible Values	Default
The Adabas name, length, and format of the field used to distribute the data into separate partitions.	see text	none
The partitioning field of a partitioned file can be a standard Adabas field, a descriptor, a superdescriptor, a subdescriptor, or a dummy field.		
It 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 (length of zero in the FDT); or		

Description	Possible Values	Default
a field with the long alphanumeric (LA) attribute.		
The Adabas UQ attribute is supported only for fields defined as the partitioning field, and only if the appropriate Adabas field name is defined with the UQ option in the Adabas FDT for each partition.		
The specified Adabas short name, length, and format must be identical to its field definition in the Adabas FDT with one exception: if the partitioning field is a superdescriptor with format A (that is, one of its parent fields is defined with format A), then a format of B must be specified to enable correct specification of the Partitioning Field High Value. The field formats may be obtained from either the full or demo version of Adabas Online System, or by running the Adabas ADAREP utility.		
Note: An optional name for the partitioning field may be provided in the "display as"		
field to make the partitioning field easier to identify.		

Partitioning Field High Value

Description	Possible Values	Default
This parameter is mandatory for each partition. It is used to specify the highest value of the partitioning field that can exist in the partition. The value must be specified in accordance with the defined partitioning field's format and length. If the partitioning field's format has been defined as	see text	none
alphanumeric (A), normal alphanumeric values may be specified.		
packed decimal (P) or unpacked decimal (U), the decimal value must be preceded, if applicable, by a '-' or optionally a '+' sign.		
binary (B), the value must be specified in hexadecimal format (that is, two digits for each byte). In the case of a superdescriptor with a U or P format parent, the sign F or D must be used to indicate a positive or negative value, respectively.		

Some examples:

Defined Partitioning Field	Adabas Field Type	Specified High Value
AA,2,A	standard field	ZZ
BB,2,B	standard field	FFFF
PP,2,P	standard field	999
UU,2,U	standard field	99
S1,4,B	SUPDE=UU(1-2),AA(1-2)	F9F9E9E9
S2,4,B	SUPDE=BB(1-2),PP(1-2)	FFFF999F

- **Note**: The physical data in each Adabas file must be consistent with the implied range specified by the Partitioning Field High Value defined for the partition. This can be achieved by using:
- external sort; or
- the Adabas ADAULD utility and the SELCRIT/SELVAL selection criteria parameters. Refer to the *Adabas Utilities* documentation for information.

Partition Database Number

Description	Minimum	Maximum	Default
A database number to which Adabas commands issued against an Adabas Vista	1	65535	0
partitioned file may be directed.			

Partition File Number

Description	Minimum	Maximum	Default
A file number to which Adabas commands issued against an Adabas Vista	1	65535	0
partitioned file may be directed.			

Partition ID

Description	Minimum	Maximum	Default
A number that uniquely identifies a partition within a partitioned file.	1	65535	none
The Partition ID is used together with the Adabas ISN to form an Adabas Vista ISN. This Adabas Vista ISN is returned to the application in place of the Adabas ISN.			
The allocation of a Partition ID depends on the Partition ID Assignment of the partitioned file.			
The actual maximum value of the Partition ID is determined by the Maximum Number of Partitions established when the partitioned file is first defined.			
When such an Adabas Vista ISN is received from the application (for example, in the case of an update), Adabas Vista interprets the ISN and is able to redirect the update to the correct partition.			
Refer to the section Adabas Vista ISN for more information.			

Partition ID Assignment

Description	Possible Values	Default
Indicates whether Partition ID assignment is to be performed by Adabas Vista automatically or by the user manually.	VISTA USER	VISTA
User assignment, which requires that the user specify a Partition ID for each partition, may be useful when an application stores the Adabas Vista ISN as data and the likelihood exists that the structure of the partitioned file may change; for example, inserting new partitions or splitting current partitions.		
Refer to the section Adabas Vista ISN for more information.		

Shared Partition

Description	Possible Values	Default
This parameter can be used to enable the Adabas Vista shared partition feature (also referred to as the multipart feature).	YES NO	NO
See also the section Partition Sharing.		

Example:

Adabas Vista file partitioning normally maps each partition to a unique Adabas file:

Partition 1:	DBID=1,FNR=10,Partitioning	Field	High	Value=A
Partition 2:	DBID=1,FNR=11,Partitioning	Field	High	Value=B
Partition 3:	DBID=1,FNR=12,Partitioning	Field	High	Value=C

The shared partition feature can be used to share an Adabas file between partitions:

Partition 1:	DBID=1,FNR=10,Partitioning Field High Value=A,Shared Partition=YES
Partition 2:	DBID=1,FNR=11,Partitioning Field High Value=B
Partition 3:	DBID=1,FNR=10,Partitioning Field High Value=C,Shared Partition=YES

The above example shows the partition definitions necessary to split all records with a partitioning field value of 'B' from the main file (database 1, file 10) onto a new file (database 1, file 11).

Notes:

- 1. The partition definitions must still reflect collating sequence.
- 2. The single partition focus feature may not be used in conjunction with the shared partition feature.

Store Control Option

Description	Possible Values	Default
Controls the placement of new records into a partitioned file.	1 2 F L	1
When storing a record to a partitioned file, the value for the partitioning field is extracted from the Adabas record buffer and used to direct the new record to the correct partition: this is termed normal placement. For store operations that do not specify a partitioning field or provide a null value for it, Store Control Option may be used to direct the record to a partition.		

The value provided with this option determines the placement of new records according to the presence, absence, or value of the partitioning field within the Adabas format/record buffer. The following table indicates the actions performed for each possible value:



Note: If your requirements are not provided for in the table, contact Software AG support for further assistance.

Value	Partitioning Field with non-null value	Partitioning Field with null value	No Partitioning Field
1	normal placement	normal placement	reject
2	normal placement	reject	reject
F	normal placement	directed to first partition	directed to first partition
L	normal placement	directed to last partition	directed to last partition



Note: In cases where a null value is provided for the partitioning field and the record is subsequently stored, retrieval of the record using the partitioning field depends on the null value suppression (NU) option of the field as defined in the Adabas FDT.



Note: It is recommended that only distributed access (that is, access not based on the partitioning field) be performed on those partitioned files defined with options F or L. Otherwise, records may be retrieved out of sequence.

User Partition Concurrency

Description	Minimum	Maximum	Default
The number of concurrent Adabas Command ID sequences that a user may have	4	255	8
outstanding for each partition.			

Translation Parameters

Target Database Number

Description	Minimum	Maximum	Default
The number of the database to which an Adabas command that is subject to an	1	65535	0
Adabas Vista translation rule is to be re-directed.			

Target File Number

Description	Minimum	Maximum	Default
The number of the file to which an Adabas command that is subject to an Adabas	1	65535	0
Vista translation rule is to be re-directed.			

Mandatory

Description	Possible Values	Default
When resolving a source file into a translation target (by reference to the translation file pages defined in the client's runtime controls), Adabas Vista will always select		N
the first translation rule it finds with a mandatory attribute of Y.		

Priority

Description	Minimum	Maximum	Default
When resolving a source file into a translation target (by reference to the file	-	255	0
translation pages defined in the client's runtime controls), and a translation rule exists in more than one page – none of which have the mandatory attribute set			
to Y - then Adabas Vista will select the translation rule with the highest priority			
setting.			

Redirect

Description	Possible Values	Default
To provide additional flexibility during translation processing, the active target category (mode) can be altered using Redirect.		none
Any such redirection is maintained for the remainder of the translation process.		

No Translation

Description	Possible Values	Default
You can explicitly prevent translation by leaving the target database and file and redirect category empty and marking the "None" attribute with any non-blank character.		see text

User Info

Description	Possible Values	Default
This field is provided for use by the DBA.		none
(optional)		

Target Category Parameters

First-level Null Definition Policy

Description	Possible Values	Default
Specifies how Adabas Vista should react at runtime if the translation process for the active target category (mode) results in a "null" outcome. Options are:	Select one of the options	see text
Allow calls for which no rules exist (default)		
Reject with response 249, subcode 106 at end of page-merge		
■ Use the rule from a nominated category		

Category Adjustment Policy

Description	Possible Values	Default
Specifies whether Adabas Vista at runtime should honour translation rules that change the active target category (mode). Options are: Allow a rule in a page to change (redirect) category (default) Reject with response 249, subcode 107	Select one of the options	see text

Second-level Null Definition Policy

Description	Possible Values	Default
Specifies how Adabas Vista should react at runtime if the first-level null definition policy redirects to another target category (mode) which in turn results in a "null" outcome. Options are:		see text
Allow calls for which no rules exist (default)Reject with response 249, subcode 108 at end of page-merge		

3 Adabas Vista Client Runtime Controls

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Clustered Application Service Name

Description	Possible Values	Default
The service name used to link together the instances of the clustered application system.	see text	none
For clustered applications such as job types CICS Cluster, IMS, or UTM, the service name is required to link all the instances of the same application system. If the job is running in a single operating system image (for example, UTM), the service name is still required.		
Refer to the Adabas System Coordinator documentation for more information.		

Parameters

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Command Time

Description	Possible Values	Default
An optional hexadecimal value that Adabas Vista will set in the Command Time field of the Adabas Control Block for any command not passed to Adabas. The default is 00000000.	Eight hexadecimal characters.	See text

Database Number for ET Data

Description	Minimum	Maximum	Default
When this control is set to non-null it is used as the database number for all commands using ET data. This allows you to strictly control the place where ET data operations take place.	0	65535	0
There are other Software AG products (such as Transaction Manager and Natural) that also provide controls for processing ET data commands. If these products are used (together) the precedence over which products control wins is 1) Adabas Transaction Manager 2) Adabas Vista 3) Natural.			
When this control is set to null the database number in the command is trusted by Vista as the place for ET data (Adabas Transaction Manager may still take precedence if it is present); where the trusted database number is used it must either be a) active to be able to process the ET data or b) explicitly translated by an all-files Vista translation rule to a database that is active.			

Distributed Lock Mode

Description	Possible Values	Default
Controls the type of record hold processing to be used in a partitioned environment.	0 1 2 3	0
This parameter is applied when a distributed READ(L6) or FIND(S4) command is issued against a partitioned file.	4	
Possible values are:		
■ 0: Normal processing.		
■ 1: The hold option is removed from the command and a L3 or S1 command is issued instead. If a record is to be modified, the corresponding ISN for the record is placed in hold status before it is modified.		

Description	Possible Values	Default
■ 2: The hold option is removed from the command and a L3 or S1 is issued instead. Record collating-sequence processing occurs immediately before returning a record to the user. After this processing, the record is placed in hold status.		
■ 3: The same as value '2' with an added integrity check during collating-sequence processing.		
■ 4: READ (L6) and FIND (S4) commands result in response code 249.		

See also section Distributed Lock Mode.

Enable Multiple Database Updates

Description	Possible Values	Default
Controls whether or not a client can update more than one database in a single transaction.	YES NO	YES
Using Adabas Vista for file partitioning and translating increases the probability of a single transaction spanning multiple databases. In such circumstances, the Adabas Transaction Manager (ATM) should be used to ensure the integrity of the transaction. If this parameter is set to YES, Adabas Vista processes ET commands serially. Any failure during this serial process jeopardizes the integrity of the transaction. It is therefore recommended that this parameter be set to YES <i>only</i> when the Adabas Transaction		
Manager is installed. If Adabas Transaction Manager is not used, this parameter can be used to allow or disallow multiple database updates within the same transaction:		
If allowed, ET (or BT) commands are issued serially to the relevant databases. Under such conditions, the programmer should not assume any particular sequence of ETs.		
■ If disallowed, an Adabas Vista response code is generated whenever an attempt is made to modify a second database within one transaction.		

Error Reporting

Description	Option	Possible Values	Default
Controls whether or not the WTO option is to be used during Adabas Vista error message processing.	WTO	YES NO	NO
The WTO option identifies the subcode of an Adabas Vista error for those programs that do not have ON ERROR processing to display the subcode. The subcode is needed to uniquely identify the reason for the error. See also section Error Handling.			
If YES is specified for the WTO option, an error message written to the job log identifies the subcode associated with each Adabas Vista error. This error message has the prefix AVI-0018-10.			

Error Response Code

Description	Possible Values	Default
The Adabas response code to be used for identifying Adabas Vista processing errors.	see text	249
A subcode in the Additions 2 field of the Adabas Control Block uniquely identifies the actual error. Possible values for this subcode are detailed in the section Messages. See also section Error Handling.		
If you need to use a response code other than the default 249, refer to the <i>Adabas Messages and Codes</i> documentation for unused response codes.		

Estimated Client Sessions

Description	Possible Values	Default
Determines the approximate size of the Adabas System Coordinator user pool where	number	type a: 2 type b: 1000
type "a" represents batch, TSO, CMS, and TIAM jobs		
type "b" represents Com-plete, CICS, CICSplex, IMS, and UTM jobs		
Refer to the <i>Adabas System Coordinator</i> documentation for more information.		

Extended Hold

Description	Possible Values	Default
Indicates whether the P and M options on all transaction directives will be honored.	MINIMUM MAXIMUM	MINIMUM
Possible values are:	IVII DATIVICIVI	
■ MINIMUM: P and M options on the first transaction directive will be honored – all other held records will be released.		
■ MAXIMUM: All records will be preserved on hold until subjected to any P and M options provided during the transaction directive sequence.		
For more information on extended hold processing, see Extended Hold in section Transaction Directives.		

Fixed Memory Pool Size

Description	Possible Values	Default
Determines the initial size of all fixed pools managed by the Adabas System Coordinator.	size	256
Refer to the Adabas System Coordinator documentation for more information.		

Global Format IDs

Description	Language	Possible Values	Default
Indicates whether or not global format IDs are to be used. This parameter enables a user-supplied global format ID to be propagated appropriately when issued against a partitioned file. Note: Adabas Vista supports Natural global format IDs.	Natural	YES NO	Natural: YES 3GL: NO
Note: If this parameter is set to YES for a 3GL language, the programmer must ensure that the uniqueness of the supplied global format ID is maintained in the last 5 bytes of the 8-byte Additions 5 field of the Adabas Control Block. This allows Adabas Vista to use the first 3 bytes internally.			

Manage Sessions

Description	Possible Values	Default
Determines type of session management to be used for clustered application sessions	see text	Manage Terminal Sessions only
For clustered applications (job types CICS Cluster, IMS, UTM) where dynamic user movement is possible, you can choose to manage only terminal tasks. This is more efficient and is possible when non-terminal tasks do not move between regions in a clustered application.		
Refer to the <i>Adabas System Coordinator</i> documentation for more information.		

Mask RSP148 on OP commands

Description	Possible Values	Default
When Vista processes an OP command from the application layer it may be that the database number in the OP command does not exist (and never will). However, Vista has no way of knowing this, so may get a RSP148 (response code 148) to the command. Vista can allow that response to be fed back to the application layer but it may trigger unwanted error processing for some applications. This parameter controls whether Vista exposes the RSP148 to the application layer or resets it to RSP000. If reset, the following OP control block fields can be set for return (default values are shown here):		YES
■ ISN Quantity 07040400 (Version/Release/SM) ■ Additions-4 740000 (Version /Release/dbid) This runtime central may also be referenced when processing commands which are		
This runtime control may also be referenced when processing commands which are candidates for suppression such as RC and RI commands.		

Mode

Description	Possible Values	Default
The mode is used to differentiate between translation rule destinations (target database and file numbers for commands) for user groups. A default mode must be identified if the job uses Vista translation.	The specified name must be defined in the configuration file before it can be used against a translation rule.	see text
The default value for a given configuration file is the first category defined in the Site Policies for Target Categories screen. See Adabas Vista Online Services, Maintain Site Policies for Target Categories, for more information.		

Pages

Description	Possible Values	Default
Pages contain translation rules and influence the translation capabilities of Adabas Vista enabled jobs.		
Pages can be differentiated between those that are implicitly referenced by Adabas Vista and those that are explicitly referenced by Adabas Vista.		
The only implicitly referenced page is the *site page. You do not need to define this page to any job. Once this page is established, Adabas Vista will always reference it first.		
Explicitly referenced pages are those that you define to the job and are referenced in the order they are defined. If a *site page exists then this page will be referenced <i>before</i> any of the defined pages.		
The runtime translation rules for a session are merged from the *site page (if used by the site) and the other pages defined for the job. Where a duplicate rule is found conflict resolution is based upon the individual rule's settings for mandatory and priority in conjunction with the policy set for the site's conflict resolution.		
See Adabas Vista Online Services, File Translation, for more information.		

System Coordinator Group Name

Description	Possible Values	Default
Identifies the Adabas System Coordinator group that is to manage the job.	see text	none
For clustered applications (job types CICS Cluster, IMS, UTM), this name is required to link all the instances of the job in the cluster. If the job is running in a single image (for example, UTM), the name is still required.		
Refer to the Adabas System Coordinator documentation for more information.		

Trace

Description	Option	Possible Values	Default
Indicates whether or not user command tracing is to be used.	Active	YES NO	NO
The number of commands for which trace entries are to be used.	Commands	0 - 1000	128
Note: Information from these trace entries can be displayed by using			
the CLOG function of the Adabas Vista API. A sample use of this API can be found in the program AVICLOG in the INPL dataset.			
Caution: Do not modify this program as it may be required for support			
purposes.			

Vista ON/OFF for Job

Description	Possible Values	Default
Indicates whether or not Adabas Vista is to be enabled for a job.	ON OFF	ON
Adabas Vista checks each command which may include checking against the configuration file to determine if the command should be translated, or whether it accesses a partitioned file. If it is known that a particular job makes no access to files that need to be under Adabas Vista control, this parameter can be used to disable Adabas Vista processing in order to enhance throughput.		
Caution: If Adabas Vista processing is disabled, there will be no recognition of		
commands that need to be targeted elsewhere. Therefore, care should be taken when using this parameter.		