Adabas Vista Application Programming Interface

Adabas Vista makes as much information as possible available to the application programmer through the Adabas Vista application programming interface (API).

All API functions are available for Natural and most API functions are also available for 3GL programs.

The Adabas Vista installation INPL dataset includes example programs that invoke each of the available API functions. These functions can be executed by the application for whom the information is relevant.

The necessary Natural objects must be installed according to the instructions provided in the section Installation.

- Executing APIs with Natural and 3GL Programs
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Executing APIs with Natural and 3GL Programs

Any API invoked changes only remain active for the duration of a user's session.

In a Natural environment, if you log on to the Adabas Vista library to execute these API functions the change may be lost when you log back on to your application library. This is due to Natural's session handling.

To avoid losing such changes, make the API example programs available without the need to log on to another library:

- If Natural Security is in use, include the Adabas Vista library SYSMV*vrs* in the steplib of the application library.
- If Natural Seurity is not in use, copy the appropriate API program to the Natural SYSTEM library along with the objects API0000P and API00*n*VP where*n* is the API function number.

In a 3GL environment, the supplied AVIPAPI program enables a 3GL program to utilise these API functions. Each API function available for use by a 3GL program has an example program in the Adabas Vista source library. These programs are named APIASM*nn*, where *nn* corresponds to the Natural example program number in the table below. For example, APIASM09 is the sample 3GL API program for the CATEGORY function.

API Function Overview

The following table lists the available API functions:

Function	Option	Description	Example
CATEGORY	UPDATE	Modifies the user's current target category.	API009UP
	EXTRACT	Extracts the user's current target category.	
CLOG		Traces user commands (only if job parameter Trace is active).	API001UP / AVICLOG
CONTEXT	UPDATE	Modifies the user's current context. Also allows the temporary suspension of the user's current context. Possible values: S: single context M: multiple contexts (suspend the current context).	API010UP
	EXTRACT	Extracts the user's current context. Possible values: ' ': current context L: list all user contexts	
	DELETE	Deletes a specified suspended context, or all suspended contexts for the user. Possible values: ' ': specified context A: all suspended contexts.	
CONVISN	ADATOAVI	Converts an ISN from Adabas format to Adabas Vista format (including Partition ID).	API007UP
	AVITOADA	Converts an ISN from Adabas Vista format to Adabas format.	
CRITREP		Lists partitions identified as unavailable for the specified partition file.	API005UP
ERRM		Translates a supplied Adabas Vista subcode into an error text message.	API002UP
PARTLIST		Lists all partitions for the specified partitioned file.	API006UP
PARTOPTS	UPDATE	Modifies the user's current `Access` and `Critical` parameter values for the specified partitioned file and partition.	API004UP
	EXTRACT	Extracts the user's current `Access` and `Critical` parameter values for the specified partitioned file and partition.	
PROFID	UPDATE	Modifies the user's current Profile ID.	API003UP
	EXTRACT	Extracts the user's current Profile ID.	

Function	Option	Description	Example
TRTARG	UPDATE	Modifies a specific translate rule for a user.	API008UP
	EXTRACT	Extracts the details of a user's current translation rule for a given source profile.	

Note:
In a Natural environment, the use of multiple applications may mean that Natural issues close (CL) commands. Therefore, any API calls must be re-issued at each application logon.

API Function Descriptions

- CATEGORY Function
- CONTEXT Function
- PARTOPTS Function
- PROFID Function
- TRTARG Function

CATEGORY Function

During application logon, each client may identify its own target category to Adabas Vista using the CATEGORY function. Adabas Vista then uses this Target Category ID together with the Profile ID, source database, and file number to determine the appropriate target database and file number to which commands issued by the application are to be directed.

This function can be executed any number of times during a session to enable dynamic file translation.

The use of the update option of this function will cause an internal backout of all access by this application. Adabas Vista will issue BT and CL commands to all relevant databases to effect this backout.

CONTEXT Function

During application logon, the current context is defined by the Profile ID and Target Category parameters defined for the current job. Each parameter may be dynamically modified by use of the appropriate API function. The CONTEXT function extends this processing.

This function may be used to suspend temporarily the current context for the client and continue processing in a new context. The client application controls the use of such contexts and determines at which point a suspended context should be resumed.

The DELETE option enables the application to terminate any context that is currently suspended. Adabas Vista will issue RCcommands at this point.

PARTOPTS Function

The PARTOPTS function is used to update or extract the user's current `Access` and `Critical` partition parameter values for the specified partitioned file and partition.

The following Access values are available:

Value	Description
F	Set the `Access` partition parameter value to FULL.
R	Set the `Access` partition parameter value to READ.
N	Set the `Access` partition parameter value to NONE.
O	Enable the single partition focus feature for this partition.
X	Reset all `Access` partition parameter values to the defaults.

The following Critical values are available:

Value	Description
Y	Set the `Critical` partition parameter value to YES.
N	Set the `Critical` partition parameter value to NO.

PROFID Function

During application logon, each client may identify its own Profile ID to Adabas Vista using the PROFID function. Adabas Vista then matches this ID with the Profile ID of a translation rule or partition definition that uses the same source database and file number to re-direct commands issued by the client to the appropriate target database and file number.

This function can be executed any number of times during a session to enable dynamic file translation.

The use of the update option will cause an internal backout of all access by this client. Adabas Vista will issue `BT` and `CL` commands to all relevant databases to effect this backout.

Note:
The CATEGORY and PROFID functions may be used in conjunction with this function to enable dynamic file translation.

TRTARG Function

This function can be used to extract or update a specific target database and file number. The client application provides the source database and file number, which is combined with the client's current Profile ID. Using this source profile and the client's current target category, the appropriate details are extracted or updated as required. The update action is only available for translation rules.

The use of the update option will cause an internal backout of access to the specified file. Adabas Vista will issue `RC` command(s) to effect this backout.

Note:
This API can only be used to extract/update details for a ’file’ translation profile - it cannot be used to extract/update details for an ’all-files’ profile.