

C1 Command: Write a Checkpoint

The C1 command writes the command ID, PLOG, RABN checkpoint, and buffer flush option.

This chapter covers the following topics:

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Function and Use

The C1 command is used to request that a checkpoint be taken.

C1 commands are normally only issued by exclusive control update users (who are not using ET logic) and/or users who are operating in single-user mode.

Adabas executes an implied C1 command at the beginning of a user program in which exclusive file control updating has been requested.

The result of the C1 command is a checkpoint entry in the Adabas checkpoint table. This checkpoint entry

- contains the checkpoint identifier (the value provided by the user in the command ID field), and the current data protection log and block number.
- may be used to restore the database (or certain files) to the status in effect at the time the checkpoint was taken. This may be necessary before a program performing exclusive control updating can be rerun or restarted.

Specifying the "F" (flush buffers) option in either command option field forces Adabas to flush the contents of the Adabas buffer pool to external storage at the end of command processing.

Command: C1

User Control Block

Field	Position	Format	Before Adabas Call	After Adabas Call
	1-2	--	--	--
COMMAND CODE	3-4	alphanumeric	F	U
COMMAND ID	5-8	alphanumeric	F	A
FILE NUMBER*	9-10	binary	F	U
RESPONSE CODE	11-12	binary	--	A
	13-34	--	--	--
COMMAND OPTION 1	35	alphanumeric	F	U
COMMAND OPTION 2	36	alphanumeric	F	U
	37-72	--	--	--
COMMAND TIME	73-76	binary	--	A
USER AREA	77-80	--	--	U

User Buffer Areas

Not used

where:

F Filled in by user before Adabas Call

A Filled in by Adabas

U Unchanged after Adabas call

* A database ID is only necessary if you are accessing multiple databases and need to limit the command operation to a specific database.

-- Not used

Control Block

Command Code

C1

Command ID

A non-blank, non-zero value must be entered in this field. This value identifies the checkpoint taken. It is not necessary that each value provided for each checkpoint be unique.

A value of "0000" or "SYNC" may not be specified.

The first byte of this field may not be set to hexadecimal 'FF'.

File Number

A database ID is only necessary if you are accessing multiple databases and need to limit the command operation to a specific database.

Response Code

Adabas returns the response code for the command in this field. Response code 0 indicates that the command was executed successfully. If the C1 command returns a non-zero response code, the rightmost two bytes of the Adabas control block, bytes 45-48 (additions 2 field), may contain a subcode defining the exact response code meaning. Response codes and their subcodes are defined in the *Adabas Messages and Codes* documentation.

Command Option 1/2 (Flush Buffers Option)

Option	Description
F	(flush buffers) specified in either command option field forces Adabas to flush the contents of the Adabas buffer pool to external storage at the end of command processing.

Example

A checkpoint entry is to be written. The checkpoint is to be identified by the value "UCP4".

Control Block

Command Code	C1	
Command ID	UCP4	checkpoint identifier