C3 Command: Write Checkpoint

The C3 command writes a SYNX-03 checkpoint in the Adabas checkpoint file.

This chapter covers the following topics:

- Function and Use

- Command: C3

- Control Block

- Record Buffer

- Example

Function and Use

The C3 command may be issued only by exclusive control/update users (who are not using ET logic).

The primary function of the C3 command is to write a SYNX-03 checkpoint in the Adabas checkpoint file. This checkpoint entry

- contains 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.

If command option 2 is specified, the C3 command also stores user data in the Adabas checkpoint file for restart purposes. The stored data may be subsequently read with an OP or RE command.

Command: C3

User Control Block

Field	Position	Format	Before Adabas Call	After Adabas Call
	1-2	--	--	--
COMMAND CODE	3-4	alphanumeric	F	U
	5-8	--	--	--
FILE NUMBER**	9-10	binary	F	U
RESPONSE CODE	11-12	binary	--	A
	13-26	--	--	--
RECORD BUFFER LENGTH	27-28	binary	F	U
	29-35	--	--	--
COMMAND OPTION 2	36	alphanumeric	F	U
	37-72	--	--	--
COMMAND TIME	73-76	binary	--	A
USER AREA	77-80	--	--	U

User Buffer Areas

Buffer	Before Adabas Call	After Adabas Call
FORMAT BUFFER	*	
RECORD BUFFER	F	U

where:

F   Filled in by user before Adabas Call

A   Filled in by Adabas

U   Unchanged after Adabas call

*   Not used but must be included in parameter list of call statement

**   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

C3

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.

Response codes and their subcodes are defined in the *Adabas Messages and Codes* documentation.

Record Buffer Length

This field is used only if command option 2 is specified.

The number of bytes of user data to be stored must be specified in this field.

The maximum length that may be specified is 2000 bytes.

Command Option 2: Store User Data

Option	Description
E	indicates that user data is to be stored in the Adabas checkpoint file when the session terminates. This option is only available if the user provided a non-blank, unique user ID during the OP command for the user session.

Record Buffer

The record buffer contains the user data to be stored in the Adabas checkpoint file. The number of bytes actually stored is determined by the value specified in the record buffer length field.

The user data is retained only if the user issued an OP command for the user session in which a non-blank, unique user ID was provided. The data is retained until the next C3 or CL command issued by this user in which user data is provided. If a non-blank, unique user ID was not provided, the data cannot be retrieved in a subsequent session.

Example

The user program issues a C3 command and provides user data to be stored in the Adabas checkpoint file.

Control Block

Command Code	C3	
Record Buffer Length	17	17 bytes of user data to be stored
Command Option 2	E	user data are to be stored

Buffer

Record Buffer	EXU-USER ET-DATA