

# Checkpoints

This chapter is organized as follows:

- Types of Adabas Users
- Checkpoint Names Starting with 'SYN'
- Checkpoint Numbers for 'SYN' Names (Mainframe Databases Only)

▶ **To review the checkpoints for an Adabas database:**

1. Select an Adabas database in tree-view and expand it.
2. Select **Checkpoints** in tree-view.

The checkpoints for the database are displayed in detail-view.

The table columns are described as follows:

Column	Explanation
Name	The checkpoint name; that is, the checkpoint identifier. In the case of a user non-synchronized checkpoint, the name is supplied by the user program. Checkpoint names starting with 'SYN' are reserved for the Adabas nucleus and utilities and are described in the section <i>Checkpoint Names Starting with 'SYN'</i> .
Date	The date and time the checkpoint was taken.
PLOG No.	The PLOG that the nucleus is currently writing.
Extended Information	

For mainframe databases, the additional information is available:

Column	Explanation
Type	The checkpoint number. For checkpoint names starting with 'SYN', the checkpoint numbers are provided in the section <i>Checkpoint Numbers for 'SYN' Names</i> .
BlockNo.	The block number of the data protection log in which the checkpoint was written.
VOLSER	Either the number of the sequential protection (DD/SIBA) log or 'DUAL' if dual logging is being used.
User	The type of Adabas user that set the checkpoint. These types are described in the section <i>Types of Adabas Users</i> .
JobName	The name of the job that created the checkpoint.

For more information about checkpoints, see the section *ADAREP* in the *Adabas Utilities* documentation.

▶ **To delete the checkpoints:**

1. Right-click **Checkpoints** in tree-view.
2. Select **Delete Checkpoints** on the drop-down menu.

The **Delete Checkpoints** panel appears in detail-view.

3. The available options are:

Delete Checkpoints from (and older):	Remove all checkpoint file entries up to the date you specify in the field.
Delete Checkpoints older than "n" days:	Remove all checkpoint file entries older than the number of days you specify in the field.

Enter a date or a value for the number of days and click **Delete** to confirm.

The **Delete Checkpoints Success** panel is displayed.

4. Click **OK** to return to the **Checkpoints** display panel.

## Types of Adabas Users

The following user types may appear in the list of checkpoints:

ACC	Access-only user
ET	ET logic user
EXF	Exclusive file control user or utility (privileged user)
EXU	Exclusive file update user or utility
UTI	Utility update control utility (privileged user)
UTS (mainframe only)	Online ADASAV SAVE file (privileged user)

## Checkpoint Names Starting with 'SYN'

Checkpoint names starting with 'SYN' are reserved for the Adabas nucleus and utilities:

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) or ADADBS with three exceptions from the nucleus. 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 dataset that 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).

## Checkpoint Numbers for 'SYN' Names (Mainframe Databases Only)

The following table describes the checkpoints written by an Adabas nucleus or utility:

Type	Name	Origin	Description
01	SYNC	ADANUC	Written by a nucleus at the start of a nucleus session
01	SYNF	user/utility	User/utility session OPEN with files used in EXF mode
01	SYNX	EXU user	Open checkpoint for an EXU user
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	SYNP	ADASAV	Start of SAVE file(s) operation

Type	Name	Origin	Description
06	SYNP	ADASAV	Start of SAVE database operation
07	SYNP	ADASAV	End of RESTORE file(s) operation
08	SYNP	ADASAV	End of RESTPLOG operation
09	SYNV	ADASAV	SAVE file(s), VOLSER entry; written at volume switch on DD/SAVE or at the end of a SAVE operation
0A	SYNV	ADASAV	SAVE database, VOLSER entry; written at volume switch on DD/SAVE and at the end of a SAVE operation
0B	SYNP	ADASAV	End of SAVE DELTA operation
0C	SYNP	ADASAV	End of RESTORE operation
0D	SYNP	ADASAV	End of MERGE 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
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
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	SYNV	ADARES	COPY sequential protection log
28	SYNP	ADARES	PLCOPY function successfully completed
28	SYNV	ADARES	PLCOPY dual protection log
29	SYNV	ADARES	CLCOPY dual command log
2A	SYNP	ADARES	PLCOPY MERGE function successfully completed

Type	Name	Origin	Description
2A	SYNV	ADARES	PLCOPY MERGE dual protection log
2B	SYNP	ADARES	CLOG MERGE function successfully completed
2B	SYNV	ADARES	CLOG MERGE dual command log
30	SYNP	ADALOD	LOAD file
31	SYNP	ADALOD	Mass update
35	SYNX	ADAULD	Unload file
3F	SYNP	ADAZAP	VERIFY - REPLACE successfully completed
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
4E	SYNS	SYSAOS	Reuse ISN
4F	SYNS	SYSAOS	Reuse Data Storage
50	SYNS	SYSAOS	UNCOUPLE file
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

Type	Name	Origin	Description
5B	SYNS	ADARES	Write refreshed statistics (command usage, file usage, DRES, DSTAT, thread usage)
5C	SYNS	SYSAOS	Change default field format
5D	SYNS	SYSAOS	Change file encoding
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
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
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
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