Adabas operator commands are entered during an Adabas session or during utility operation to

- terminate an Adabas or user session;
- display nucleus or utility information;
- log commands into CLOG;
- change Adabas operating parameters or conditions.

In this chapter, the commands are listed alphabetically. One command, DSTAT, is listed twice: once as a command for displaying nucleus status, and separately as a command to display current Adabas utility operating status.

- For Adabas Caching Facility operator commands, see the Adabas Caching Facility documentation.
- For Adabas Parallel Services operator commands, see the Adabas Parallel Services documentation.
- For operator commands in a sysplex cluster environment, see the Adabas Cluster Services documentation.

This chapter covers the following topics:

- Entering Operator Commands
- Operator Commands
- SMGT Display Output Samples

# **Entering Operator Commands**

This section describes how to enter operator commands in different environments. It is divided into the following topics:

- Entering Commands on BS2000 Systems
- Entering Commands on z/OS Systems
- Entering Commands on z/VM Systems
- Entering Commands on VSE Systems

# **Entering Commands on BS2000 Systems**

In BS2000 environments, enter each command at the operator console by addressing the Adabas nucleus with its task sequence number (TSN) in the following form:

/INTR TSN, command

For testing purposes, the nucleus may be run as a dialogue process. The nucleus may be interrupted by pressing the K2 key, after which the prompt "/" appears. Now an operator command can be sent to the nucleus in the following form:

/INTR command

#### Note:

In the dialogue mode, the nucleus stops as long as the INTR message is not sent back. The resume statement /RESUME causes the nucleus to resume where it was interrupted when no operator command is issued.

Operator commands are processed by a STXIT routine.

## **Entering Commands on z/OS Systems**

To enter operator commands in z/OS environments, use the z/OS MODIFY (F) command as shown below:

F jobname,command

where *jobname* is the name specified by the EXEC job control statement (usually ADARUN).

## **Entering Commands on z/VM Systems**

In z/VM environments, use the CP SEND command to enter operator commands from either the console of the virtual machine or from a secondary console of a disconnected virtual machine.

#### **Example:**

```
CP SEND USER04 ADAEND
```

- issued at the DBA virtual machine console sends the ADAEND command to the USER04 virtual machine, providing that the CP directory for the USER04 virtual machine contains a CONSOLE statement enabling the DBA console as a secondary console.

## **Entering Commands on VSE Systems**

To enter operator commands in VSE environments, use the following steps:

1. Enter an MSG command for the VSE partition in which Adabas is executing.

#### **Example:**

MSG Fn

When ready for communication, Adabas will respond with Adabas message ADAI29. In cases where the commands ADAEND, CANCEL, and HALT cause Adabas to end the nucleus session, no outstanding reply is presented so that an orderly shutdown can occur without the need for operator intervention.

2. Enter the desired Adabas operator command or commands.

More than one command can be entered in a session. You can also enter a command followed directly by a slash (/) to end any further operator communications until the next MSG command by VSE.

- 3. When all desired commands have been entered, close the operator communication session by entering a null command (EOB).
- 4. To enter any more commands after the session is closed, repeat this entire procedure.

# **Operator Commands**

The Adabas operator commands are grouped as follows:

- Nucleus Commands
- Adabas Utility Operator Command DSTAT
- SMGT Operator Command

## **Nucleus Commands**

The following operator commands can be entered from the console to monitor and control Adabas nucleus operation.

- ADAEND Command
- ALOCKF Command
- AOSLOG Command
- ASYTVS Command
- CANCEL Command
- CLOGMRG Command
- CLUFREEUSER Command
- CT Command
- DAUQ Command
- DCQ Command
- DDIB Command
- DDSF Command
- DELUF Command
- DELUI Command
- DFILES Command
- DFILUSE Command

- DHQ Command
- DHQA Command
- DLOCKF Command
- DNC Command
- DNFV Command
- DNH Command
- DNU Command
- DONLSTAT Command
- DPARM Command
- DPPT Command
- DRES Command
- DSTAT Command
- DTH Command
- DUQ Command
- DUQA Command
- DUQE Command
- DUUQE Command
- FEOFCL Command
- FEOFPL Command
- FMXIO Command
- HALT Command
- LOCKF Command
- LOCKU Command
- LOCKX Command
- LOGGING Command
- LOGCB Command
- LOGFB Command
- LOGIB Command
- LOGIO Command
- LOGRB Command
- LOGSB Command
- LOGUX Command
- LOOUX Command
- LOGVB Command
- NOLOGGING Command
- NOLOGCB Command
- NOLOGFB Command
- NOLOGIB Command
- NOLOGIO Command
- NOLOGRB Command
- NOLOGSB Command
- NOLOGUX Command
- NOLOGVB Command
- ONLRESUME Command
- ONLSTOP Command
- ONLSUSPEND Command>
- RALOCKF Command
- RALOCKFA Command

- RDUMPST Command
- READONLY Command
- REVIEW Command
- STOPF Command
- STOPI Command
- STOPU Command
- SYNCC Command
- TCPIP Command
- TNAA Command
- TNAE Command
- TNAX Command
- TT Command
- UNLOCKF Command
- UNLOCKU Command
- UNLOCKX Command
- UTIONLY Command

#### Note:

The DUMP command, which stopped nucleus operation and issued a dump, is no longer supported. To stop operation, use an operating system-dependent command such as a z/OS Cancel.

## **ADAEND Command**

# ADAEND [,GLOBAL]

Use the ADAEND command to terminate Adabas session normally. No new users are accepted after this command has been issued. ET logic updating is continued until the end of the current logical transaction for each user. After all activity has been completed as described above, the Adabas session is terminated. In nucleus cluster environments, the GLOBAL option can be used to terminate the Adabas session in all active cluster nuclei.

## **ALOCKF Command**



Use the ALOCKF command to lock a file in advance to ensure that an EXU, EXF, or UTI user will have exclusive control of the specified file. The advance-lock prevents new transactions from using the file. Once all current users have stopped using the file, the exclusive-control user has the lock. Until then, the exclusive-control user must wait.

To remove the advance lock without running the utility, see the RALOCKF command.

This command is not available in single user mode or for a read-only nucleus.

## **AOSLOG Command**

## AOSLOG={YES | NO}

Use the AOSLOG command to activate and deactive logging of certain Adabas calls that modify the nucleus to DD/PRINT. These calls are issued either by ADADBS OPERCOM or Adabas Online System. Read and display calls are not logged.

#### **ASYTVS Command**



Use the ASYTVS command to activate or deactive asynchronous flushing of buffers based on volume serial number.

#### **CANCEL Command**

#### CANCEL [,GLOBAL]

Use the CANCEL command to cancel the Adabas session immediately. All command processing is immediately suspended. A pending autorestart will be in effect which in turn will cause the autorestart routine to be executed during the initialization of the next Adabas session. In nucleus cluster environments, the GLOBAL option can be used to cancel the Adabas session in all active cluster nuclei.

## **CLOGMRG** Command

```
CLOGMRG={YES | NO}
```

Use the CLOGMRG command to dynamically modify the setting of the ADARUN CLOGMRG parameter.

The CLOGMRG command is only valid in cluster environments. It is global by definition and affects all nuclei in the cluster.

## **CLUFREEUSER** Command

#### Note:

The CLUFREEUSER command is only valid in cluster environments. It can be issued against the local nucleus only or, with the GLOBAL option, against all active and inactive nuclei in the cluster.

Use the CLUFREEUSER command to delete leftover cluster user table elements (UTEs or PLXUSERs) in common storage that are no longer associated with user queue elements (UQEs) in a nucleus.

- TNA TNA specifies a decimal number specifying the timeout value in seconds (*max-time*). PLXUSERs that are not used during the time specified may be deleted if other conditions are fulfilled. If TNA= is not specified, PLXUSERs may be deleted without regard to their recent use.
- UID

UID specifies a character string or hexadecimal byte string format user ID (*userid*) as follows:

сссссссс	where the argument is 1-8 letters, digits, or embedded '-' signs without surrounding apostrophes.
` <i>ccccccc</i> c`	where the argument is 1-8 characters with surrounding apostrophes.
Χ' <i>xxxxxxxxxxxxx</i>	where the argument is an even number of 2-16 hexadecimal digits enclosed by X' '.

A character string must be enclosed in apostrophes if it contains characters other than letter, digits, or embedded '-' signs. If a specified character string is less than eight characters long, it is implicitly padded with blanks. If a specified hexadecimal string is shorter than 16 hexadecimal digits, it is implicitly padded with binary zeros. If the last eight bytes of a user's 28-byte communication ID match a specific user ID or user ID prefix (UIDPRFX parameter), that user's PLXUSER may be deleted if other conditions are fulfilled. If UID is not specified, PLXUSERs may be deleted regardless of their user IDs. "UID" may be abbreviated to "U".

UID and UIDPRFX are mutually exclusive; one or the other, but not both, can be specified.

UIDPRFX UIDPRFX accepts the same operands as UID. It operates in the same manner as UID, except that the operand is considered a prefix and there is no implicit padding. If the operand matches the initial bytes of the last eight bytes of the 28-byte communication ID, that PLXUSER may be deleted if other conditions are fulfilled. "UIDPRFX" may be abbreviated to "UP".

UID and UIDPRFX are mutually exclusive; one or the other, but not both, can be specified.

- FORCE FORCE indicates that leftover PLXUSERs are to be deleted even if the users are due a response code 9, subcode 20. If FORCE is not specified, such PLXUSERs are not deleted. Before using the FORCE parameter, ensure that the users owning the PLXUSERs to be deleted will not expect any of their transactions to remain open.
   GLOBAL GLOBAL indicates that leftover PLXUSERs throughout the Adebes glueter are to be deleted if they are no longer associated.
- Adabas cluster are to be deleted if they are no longer associated with UQEs and are eligible according to the other specified parameters. Additionally and subject to the other rules, leftover PLXUSERs are deleted if their assigned nuclei have terminated since their last use. If GLOBAL is not specified, only PLXUSERs assigned to the local nucleus and used since the nucleus start are eligible for deletion.

## **CT Command**

# CT=timeout-limit

Use the CT command to dynamically override the ADARUN CT parameter value; that is, the maximum number of seconds that can elapse from the time an Adabas command has been completed until the results are returned to the user through interregion communication (which depends on the particular operating system being used). The minimum setting is 1; the maximum is 16777215.

In nucleus cluster environments, the CT command is global by definition and affects all nuclei in the cluster.

## **DAUQ Command**



Use the DAUQ command to display the user queue elements of those users who have executed at least one Adabas command within the last 15 minutes.

## **DCQ** Command



Use the DCQ command to display all posted command queue elements (CQEs). The DCQ command displays each CQE's user ID, job name, and buffer length.

## **DDIB** Command



Use the DDIB command to display the data integrity block (DIB). This block contains entries indicating which Adabas utilities are active and the resources being used by each utility.

#### **DDSF** Command

DDSF	

Use the DDSF command to display Adabas Delta Save Facility status. The DDSF command is only available if the Adabas nucleus is run with the parameter ADARUN DSF=YES.

#### **DELUF Command**

DELUF=file-number
-------------------

Use the DELUF command to delete all users who are using the specified file. Any open transactions of the deleted users are backed out.

This command does not delete EXF or UTI users.

The DELUF command corresponds to the ADADBS OPERCOM STOPF=file-number,PURGE function.

#### **Caution:**

If Adabas is running with ADARUN OPENRQ=NO (specifying that users are not required to issue an OP as the first command of the session), run the DELUF command only if you are certain that the users to be deleted are no longer active. If a user with an open transaction is deleted, but then returns (by sending a command), no indication is given about the transaction backout. If the user continues the transaction, logical inconsistencies in the database could occur.

## **DELUI** Command

DELUI= timeout-limit

Use the DELUI command to delete all users who have not executed a command during the specified time interval (in seconds). Any open transactions of the deleted users are backed out.

This command does not delete EXF or UTI users.

The DELUI command corresponds to the ADADBS OPERCOM STOPI=time, PURGE function.

#### **Caution:**

If Adabas is running with ADARUN OPENRQ=NO (specifying that users are not required to issue an OP as the first command of the session), run the DELUI command only if you are certain that the users to be deleted are no longer active. If a user with an open transaction is deleted, but then returns (by sending a command), no indication is given about the transaction backout. If the user continues the transaction, logical inconsistencies in the database could occur.

## **DFILES** Command

```
DFILES= { n | n1 ,..., n5 }
```

Use the DFILES command to display the number of users currently accessing, updating, or controlling either a specific file (n) or a series of individual files, specified in a list (n1,...,n5). A maximum of five files can be specified in the list. Users are displayed by job name and Adabas-assigned user ID, and listed by file.

## **DFILUSE Command**



Use the DFILUSE command to display the number of total commands processed so far for the specified file during the current session. The count is displayed in the nucleus message ADAN33.

## **DHQ Command**



Use the DHQ command to display up to five hold queue elements.

## **DHQA** Command



Use the DHQA command to display up to 1000 hold queue elements.

## **DLOCKF** Command



Use the DLOCKF command to display the locked files.

## **DNC Command**



Use the DNC command to display the number of posted command queue elements waiting to be selected.

## **DNFV** Command



Use the DNFV command to display nucleus file variables; that is, information about current file use.

This command provides information about the files in use at a particular point in time. It also indicates which other nucleus has exclusive file control if, for example, a user program receives a response 148, subcode 15.

## Sample Output

ADAI29 OPE	R CMD: DNFV		
FNR=00008	A=Y U=Y ID=	CA=00000	CU=00001

where;

FNR=nnnnn	is the file number
$A = \{Y \mid N\}$	(yes or no) indicates whether the file is used for access (read and/or search)
$U{=}\{Y \mid N\}$	(yes or no) indicates whether the file is used for update. Use for update includes use for access.
ID=nucid	is the ID of the nucleus that owns the file lock, if the file is locked.
CA=nnnn	is the number of users on this nucleus who are currently accessing this file.
CU=nnnnn	is the number of users on this nucleus who are currently updating this file.

## **DNH** Command

DNH

Use the DNH command to display the number of ISNs currently in the hold queue.

#### **DNU Command**



Use the DNU command to display the number of current users.

#### **DONLSTAT Command**

DONLSTAT

Use the DONLSTAT command to display the status of each active reorder, invert online, or Event Replicator for Adabas initial-state process together with the process ID.

#### **DPARM** Command

DPARM

Use the DPARM command to display the Adabas session parameters currently in effect.

#### Sample Output

```
ADA129 Oper cmd: DPARM

ADAN16 00199 2009-01-27 22:48:43 READONLY=NO,UTIONLY=NO

ADAN16 00199 2009-01-27 22:48:43 ASYTVS=YES,AOSLOG=NO

ADAN16 00199 2009-01-27 22:48:43 NC=100,NH=500,NT=8,NU=100

ADAN16 00199 2009-01-27 22:48:43 LBP=5026304,LFP=20000,LWP=320000

ADAN16 00199 2009-01-27 22:48:43 LI=10000,LP=500,LQ=10000,LS=79872

ADAN16 00199 2009-01-27 22:48:43 LFIOP=80000,FMXIO=1,LU=65535

ADAN16 00199 2009-01-27 22:48:43 TT=6000,TNAA=6000,TNAE=6000,CT=60

ADAN16 00199 2009-01-27 22:48:43 TNAX=6000,MXTT=3600,MXTNA=3600

ADAN16 00199 2009-01-27 22:48:43 TLSCMD=300,MXTSX=3600

ADAN16 00199 2009-01-27 22:48:43 Function completed
```

#### **DPPT** Command

DPPT

Use the DPPT command to display the parallel participant table (PPT); that is, to display the nucleus's own PPT block.

This command produces internal information for use by Software AG technical support.

#### **Sample Output**

```
ADAI29 Oper cmd: DPPT
ADAN24 00199 2009-01-27 22:31:35 Display PPT RABNS 00000083 to 000000A2
ADAN24 00199 2009-01-27 22:31:35
ADAN24 00199 2009-01-27 22:31:35
                                        PPT RABN: 00000083
ADAN24 00199 2009-01-27 22:31:35 Number of entries: 05
ADAN24 00199 2009-01-27 22:31:35 Nucleus indicator: E2
ADAN24 00199 2009-01-27 22:31:35
                                          NUCID: 0000
ADAN24 00199 2009-01-27 22:31:35
                                 Session number: 0005
ADAN24 00199 2009-01-27 22:31:35 Last PLOG block: 0000000
ADAN24 00199 2009-01-27 22:31:35
                                  PLOG block ind: 00
ADAN24 00199 2009-01-27 22:31:35 PPT Entry length: 0023
ADAN24 00199 2009-01-27 22:31:35
                                        Entry ID: E6
ADAN24 00199 2009-01-27 22:31:35 Dataset=/SAGUID/PLX2/V7/WORKR1/
ADAN24 00199 2009-01-27 22:31:35 PPT Entry length: 0023
ADAN24 00199 2009-01-27 22:31:35
                                       Entry ID: 61
ADAN24 00199 2009-01-27 22:31:35 Dataset=/ SAGUID /PLX2/V7/PLOGR1/
ADAN24 00199 2009-01-27 22:31:35 PPT Entry length: 0023
ADAN24 00199 2009-01-27 22:31:35
                                        Entry ID: 62
ADAN24 00199 2009-01-27 22:31:35 Dataset=/ SAGUID /PLX2/V7/PLOGR2/
ADAN24 00199 2009-01-27 22:31:35 PPT Entry length: 0023
ADAN24 00199 2009-01-27 22:31:35
                                        Entry ID: 41
ADAN24 00199 2009-01-27 22:31:35 Dataset=/ SAGUID /PLX2/V7/CLOGR1/
ADAN24 00199 2009-01-27 22:31:35 PPT Entry length: 0023
ADAN24 00199 2009-01-27 22:31:35
                                       Entry ID: 42
ADAN24 00199 2009-01-27 22:31:35 Dataset=/ SAGUID /PLX2/V7/CLOGR2/
ADAN41 00199 2009-01-27 22:31:35 Function completed
```

#### **DRES** Command

#### DRES

Use the DRES command to display the allocated pool space and the highest use level (high water mark) reached so far during the current session by record count and by percent for the following resources:

- Attached buffers (AB) current allocation not supported
- Command queue (CQ)
- Format pool (FP)
- Hold queue (HQ)
- Pool for the table of ISNs (TBI)
- Pool for the table of sequential commands (TBQ or TBLES)
- User queue (UQ)
- Unique descriptor pool (DUQPOOL)
- Security pool

- Replication pool
- User queue file list pool
- Work pool (WP)
- Pool for global transaction IDs (XIDs; nonzero only with Adabas Transaction Manager)
- Redo pool (nonzero only with Adabas Cluster Services)

The actual values are displayed in nucleus message ADAN28 described in the *Adabas Messages and Codes* documentation.

## **DSTAT Command**



Use the DSTAT command to display the current Adabas nucleus status.

## **DTH Command**

DTH

Use the DTH command to display thread status.

## **DUQ Command**



Use the DUQ command to display up to five active and inactive user queue elements.

## **DUQA** Command



Use the DUQA command to display up to 100 user queue elements.

## **DUQE** Command

DUQE= X 'userid'

Use the DUQE command to display the user queue element for the specified Adabas-assigned user ID. The user ID must be entered in hexadecimal format as follows:

DUQE=X'A3C1F2'

Do not enter a job name in place of the user ID.

#### **DUUQE** Command



Use the DUUQE command to display utility user queue elements.

#### **FEOFCL Command**

# FEOFCL [,GLOBAL]

Use the FEOFCL command to close the current dual or multiple command log and switch to the another command log. This command is valid only if dual or multiple command logging is in effect.

In nucleus cluster environments, the GLOBAL option can be used to close and switch dual or multiple command logs in all active cluster nuclei.

#### **FEOFPL Command**

```
FEOFPL [,GLOBAL]
```

Use the FEOFPL command to close the current dual or multiple data protection log and switch to the another protection log. This command is valid only if dual or multiple data protection logging is in effect.

In nucleus cluster environments, the GLOBAL option can be used to close and switch dual or multiple protection logs in all active cluster nuclei.

#### **FMXIO** Command



Use the FMXIO command to dynamically modify the setting of the ADARUN FMXIO parameter.

## **HALT Command**

HALT [,GLOBAL]

Use the HALT command to perform a BT (back out transaction) for each active ET logic user's session, then terminate the Adabas session. No dumps are produced by HALT.

In nucleus cluster environments, the GLOBAL option can be used to perform a BT for all active ET logic user sessions and terminate the Adabas session in all active cluster nuclei.

## LOCKF Command



Use the LOCKF command to lock the specified file. No use of the specified file is possible at any security level.

## LOCKU Command



Use the LOCKU command to lock the specified file for all non-utility users. Adabas utilities can use the specified file normally.

#### LOCKX Command



Use the LOCKX command to lock the specified file for all users except EXU or EXF users. EXU and EXF users can use the file normally. The lock is released automatically when an EXU user issues an OP command.

#### **LOGGING Command**



Use the LOGGING command to start command logging.

## **LOGCB** Command



Use the LOGCB command to start logging of the Adabas control block for each command logged.

#### **LOGFB** Command



Use the LOGFB command to start logging of the Adabas format buffer for each command logged.

## **LOGIB** Command

LOGIB

Use the LOGIB command to start logging of the Adabas ISN buffer for each command logged.

## **LOGIO Command**



Use the LOGIO command to start logging of Adabas I/O activity for each command logged.

## LOGRB Command



Use the LOGRB command to start logging of the Adabas record buffer for each command logged.

#### **LOGSB** Command



Use the LOGSB command to start logging of the Adabas search buffer for each command logged.

## LOGUX Command



Use the LOGUX command to start logging of user exit B data for inclusion in the CLOG record. This command is only valid when CLOGLAYOUT=5.

## **LOGVB** Command



Use the LOGVB command to start logging of the Adabas value buffer for each command logged.

## **NOLOGGING Command**

# NOLOGGING

Use the NOLOGGING command to stop or prevent command logging.

## **NOLOGCB** Command



Use the NOLOGCB command to stop or prevent logging of the Adabas control block.

## **NOLOGFB** Command

NOLOGFB

Use the NOLOGFB command to stop or prevent logging of the Adabas format buffer.

## **NOLOGIB** Command

NOLOGIB

Use the NOLOGIB command to stop or prevent logging of the Adabas ISN buffer.

## **NOLOGIO Command**

## NOLOGIO

Use the NOLOGIO command to stop or prevent logging of Adabas I/O activity.

#### **NOLOGRB** Command

NOLOGRB

Use the NOLOGRB command to stop or prevent logging of the Adabas record buffer.

## **NOLOGSB** Command

NOLOGSB

Use the NOLOGSB command to stop or prevent logging of the Adabas search buffer.

## **NOLOGUX Command**



Use the NOLOGUX command to stop logging of user exit B data for inclusion in the CLOG record. This command is only valid when CLOGLAYOUT=5.

## **NOLOGVB** Command



Use the NOLOGVB command to stop or prevent logging of the Adabas value buffer.

#### **ONLRESUME** Command

ONLRESUME=X'identifier'

Use the ONLRESUME command to resume a previously-suspended online reorder, invert, or Event Replicator for Adabas initial-state process.

## **ONLSTOP** Command

#### ONLSTOP=X'identifier'

Use the ONLSTOP command to stop an online reorder, invert, or Event Replicator for Adabas initial-state process cleanly. The process continues up to its next interrupt point in order to produce a consistent state, and then terminates after performing all necessary cleanup.

#### **ONLSUSPEND** Command>



Use the ONLSUSPEND command to suspend an online reorder, invert, or Event Replicator for Adabas initial-state process. The process continues up to its next interrupt point in order to produce a consistent state, performs a command throwback, and enters a state where it cannot be selected for processing. This command is useful if the online process is consuming too much of the nucleus resources.

## **RALOCKF** Command

# RALOCKF=n

Use the RALOCKF command to remove the advance lock on the specified file (see ALOCKF command) without running the utility.

## **RALOCKFA** Command

## RALOCKFA

Use the RALOCKFA command to remove the advance lock on all files for which it has been set (see ALOCKF command) without running the utility.

#### **RDUMPST** Command



Use the RDUMPST command to terminate online dump status. This command is normally used if online execution of the ADASAV utility has terminated abnormally.

## **READONLY Command**

#### READONLY={YES | NO}

Use the READONLY command to switch READONLY status on or off. A value of "YES" switches it on; a value of NO switches it off.

#### **REVIEW Command**



Use the REVIEW command to:

- deactivate Adabas Review,
- change from hub mode to local mode, or
- to specify or change the Adabas Review hub with which a nucleus communicates.

#### **STOPF** Command

## STOPF=file-number

Use the STOPF command to stop all users who are using the specified file. Any open transactions of the stopped users will be backed out. A stopped user who returns (by sending a command) will receive response code 9.

This command does not stop EXF or UTI users.

#### **STOPI Command**



Use the STOPI command to stop all users who have not executed a command during the specified time interval (in seconds). Any open transactions of the stopped users will be backed out. A stopped user who returns (by sending a command) will receive response code 9.

This command does not stop EXF or UTI users.

#### **STOPU Command**



Use the STOPU command to stop and delete the user with the Adabas-assigned user ID (in the form shown in the display commands), or stop and delete all users with the specified job name (*job-name*). Any open transactions of the stopped users will be backed out.

#### **Caution:**

If Adabas is running with ADARUN OPENRQ=NO (specifying that users are not required to issue an OP as the first command of the session), run the STOPU command only if you are certain that the users to be deleted are no longer active. If a user with an open transaction is deleted, but then returns (by sending a command), no indication is given about the transaction backout. If the user continues the transaction, logical inconsistencies in the database could occur.

#### Note:

The STOPU=X'*userid*' command is not allowed for online reorder or invert processes. Use the ONLSTOP=X'*identifier*' command instead.

The user ID must be specified in hexadecimal format; for example:

```
STOPU=X'1CF2'
```

#### **SYNCC Command**



Use the SYNCC command to force synchronization for all ET users. The nucleus waits for all ET users to reach ET status.

## **TCPIP Command**



Use the TCPIP command to open or close a direct TCP/IP link to the Adabas nucleus or to close all TCP/IP links when no URL is specified.

This command is only possible when the ADARUN parameter TCPIP is set to "YES" and all conditions for that setting have been met. This command can be used to close the URL set in the ADARUN TCPURL parameter, or to open or close additional TCP/IP links.

You must identify the universal resource locator (URL) for the TCP/IP link you want to open or close. The URL is a 20-byte address that conforms to the RFC specification for URLs:

api-name://stackid:port-number

where:

- *api-name* is a 1-3 character value identifying the application programming interface (API) to use. Both APIs for the IBM TCP/IP stack (HPS, OES) and the API for the Interlink stack (ILK) are currently supported.
- *stackid* is a 1-8 character value identifying the stack to use:
  - for the HPS API, this is the name of the TCP/IP started task.
  - for the OES API, no value is needed.
  - for the ILK API, this is the subsystem identifier.

*port-number* is a 1-5 character number in decimal notation.

#### Examples

TCPIP=OPEN=ILK://ILZ5:1234

TCPIP=CLOSE=ILK://ILZ5:1234

To close all open URLs:

TCPIP=CLOSE

#### **TNAA Command**



Use the TNAA command to set the non-activity time limit for access-only users. This value must be greater than zero and replaces the value set by the TNAA ADARUN parameter.

In nucleus cluster environments, the TNAA command is global by definition and affects all nuclei in the cluster.

#### **TNAE** Command



Use the TNAE command to set the non-activity time limit for ET logic users. This value must be greater than zero and replaces the value set by the TNAE ADARUN parameter.

In nucleus cluster environments, the TNAE command is global by definition and affects all nuclei in the cluster.

## **TNAX Command**

TNAX= n	

Use the TNAX command to set the non-activity time limit for exclusive control users. This value must be greater than zero and replaces the value set by the TNAX ADARUN parameter.

In nucleus cluster environments, the TNAX command is global by definition and affects all nuclei in the cluster.

## **TT Command**



Use the TT command to set the transaction time limit for ET logic users. This value must be greater than zero and replaces the value set by the TT ADARUN parameter.

In nucleus cluster environments, the TT command is global by definition and affects all nuclei in the cluster.

#### **UNLOCKF** Command



Use the UNLOCKF command to unlock the specified file. File usage is restored to its pre-locked status.

## **UNLOCKU** Command



Use the UNLOCKU command to unlock the specified file that was previously locked for all non-utility users. File usage is restored to its pre-locked status.

## **UNLOCKX** Command

UNLOCKX=n

Use the UNLOCKX command to unlock the specified file that was previously locked for non-exclusive control users. File usage is restored to its pre-locked status.

#### **UTIONLY Command**

UTIONLY={YES | NO}

Use the UTIONLY command to switch the ADARUN UTIONLY status parameter on or off. The default is NO.

## **Adabas Utility Operator Command DSTAT**



Use the DSTAT command to display the current ADALOD, ADAORD, ADARES, ADASAV, ADAULD, or ADAVAL operating status. The following are examples of the output that results when DSTAT is entered during specific Adabas utility operations:

#### Note:

ADAORD, ADARES, ADAULD, and ADAVAL do not accept operator commands if they run in MODE=SINGLE.

#### **Example 1: ADALOD**

ADAU00 dbid OPERATOR TYPE-IN : DSTAT ADAU22 dbid LOADING DATA STORAGE. REC-NO=3599 ADAU00 dbid OPERATOR TYPE-IN : DSTAT ADAU21 dbid SORTING/LOADING DESCRIPTOR AA

#### **Example 2: ADAORD**

ADAU08 dbid OPERATOR TYPE-IN : DSTAT ADAU26 dbid UNLOADING INDEX. FILE=1 ADAU08 dbid OPERATOR TYPE-IN : DSTAT ADAU25 dbid UNLOADING DATASTORAGE. FILE=2 ADAU08 dbid OPERATOR TYPE-IN : DSTAT ADAU29 dbid LOADING DATASTORAGE. FILE=2

#### **Example 3: ADARES**

ADAU08 dbid OPERATOR TYPE-IN : DSTAT REGENERATE INPUT VOLUME = BMC002, PLOG-NUM = 12 FROMBLK = 1, FROMTIME = 1996-04-10 11:27:56 TOBLK = 1, TOTIME = 1996-04-10 11:27:56

#### **Example 4: ADASAV**

ADAU08 dbid OPERATOR TYPE-IN : DSTAT ADAU92 dbid STILL INITIALIZING ADAU08 dbid OPERATOR TYPE-IN : DSTAT ADAU10 dbid 435 BLOCKS OUT OF 465 SAVED ADAU08 dbid OPERATOR TYPE-IN : DSTAT ADAU11 dbid 342 BLOCKS OUT OF 451 RESTORED

#### **Example 5: ADAULD**

ADAU08 dbid OPERATOR TYPE-IN : DSTAT ADAU67 dbid UNLOADING FILE=17, RECNO=2875

# **SMGT Operator Command**

The Adabas error handling and message buffering facility uses a single operator command, SMGT, followed by a comma and one or more operands:

SMGT, operand [, operand ],...

Valid *operands* are: ABNORMAL, ACTIPIN, ADDPIN, DEACTPIN, DELPIN, DISPLAY, DUMP, MSGBUF, OFF, ON, SNAP, XACTIVATE, XCRITICAL, XDEACTIVATE, XLOAD, and XNOTCRITICAL. Some of these operands are mutually exlusive. All operands are described in *Operands for SMGT*.

Operands may require that you enter one or more of the following variables:

Variable Type	Description
exit-code	The code that identifies an exit routine to an SMGT operator command is one of the following:
	• UEX <i>n</i> , where <i>n</i> is a single-digit user exit number
	• UX <i>nn</i> , where <i>nn</i> is a double-digit user exit number
	• HX <i>nn</i> , where <i>nn</i> is a hyperexit number (single-digit numbers are preceded by a zero; e.g., HX02)
	• CX00 (the Adabas Caching Facility user exit)
	• SX00 (the PIN routine user exit)
start, end	The range of addresses for the SNAP operand where <i>start</i> is the hexadecimal address where the SNAP dump begins and <i>end</i> is the hexadecimal address where it ends.
module-name	The name of the module. For the XLOAD operand, it is the name of the exit routine module to be loaded; for ADDPIN and DELPIN operands, it is the name of the PIN module to be added or deleted, respectively.
pin-number	When a PIN is added, it is assigned a number that can be found using the DISPLAY=PINS operand. This pin number is used for the ACTPIN and DEACTPIN operands to identify the PIN routine to be activated or deactivated, respectively.

Acceptable abbreviations for operands are provided in mixed case notation (capital letters required, lowercase letters optional). Default values for operands are underlined.

## **Operands for SMGT**

```
SMGT,{ ABNormalterm | MSGbuf } = { ON | OFF }
```

The ABNORMALTERM (ABN) operand determines whether the error handling and message buffering facility will handle abnormal termination errors.

The MSGBUF (MSG) operand temporarily deactivates (OFF) or reactivates (ON) message buffering.

The ABN and MSG operands are mutually exclusive; if one is specified on an individual SMGT command, the other cannot be.



The ACTPIN (ACT) operand is used to activate an individual PIN routine or to reactivate it after it has been temporarily deactivated.

The DEACTPIN (DEACT) operand is used to deactivate an individual PIN routine.

The ACT and DEACT operands are mutually exclusive; if one is specified on an individual SMGT command, the other cannot be.

```
SMGT,{ ADDpin | DELpin } = module-name
```

The ADDPIN (ADD) operand adds PIN routines to the error handling facility. The PIN routine module indicated is loaded and the PINs that are found in it are added to the facility. When a PIN is added, it is assigned a number which can be found using the DISPLAY=PINS operand.

The DELPIN (DEL) operand deletes a PIN module and all the PINs it contains from the facility.

The ADD and DEL operands are mutually exclusive; if one is specified on an individual SMGT command, the other cannot be.

```
SMGT, Display = { <u>ALL</u> | EXITS | MSGBUF | PINS | SUMMARY | LAST }
```

The DISPLAY (D) operand writes status and history information about the error handling and message buffering facility to the job log and to DDPRINT:

ALL	(the default) displays all reports
EXITS	displays current user exit, hyperexit, and other exit status
MSGBUF	displays message buffering status
PINS	displays PIN routine status
SUMMARY	displays only the summary information from ALL
LAST	displays details of the most recent recovery action

Sample output for the various DISPLAY values is provided in SMGT Display Output Samples.

```
SMGT, DUMP = { ON | OFF }
```

The DUMP operand determines whether a full system dump is taken for the Adabas nucleus in the event of an error. The default (OFF) means that only a snap dump is taken.

#### Note:

To use this command successfully under z/OS, the data set ADASNAP must be provided in the Adabas startup JCL. For more information, read *Adabas Session Execution*.



The OFF operand deactivates the error handling and message buffering facility temporarily; the ON operand reactivates it.

When SMGT=OFF:

- The only valid SMGT operands that can be specified after SMGT=OFF is specified are ON (in a new SMGT command) and DISPLAY. All other SMGT commands are rejected until SMGT=ON is issued.
- All other functions of the error handling facility are disabled. PIN modules cannot be invoked. Any user exits marked NOTCRITICAL are treated as CRITICAL; that is, the nucleus terminates abnormally if an error occurs in the exit.

The ON and OFF operands are mutually exclusive; if one is specified on an individual SMGT command, the other cannot be.

```
SMGT, SNAP [= (start, end)]
```

The SNAP operand displays a formatted dump of the nucleus without error diagnostics. If SNAP is specified without any additional parameters, the whole nucleus is displayed; if hexadecimal addresses are specified for start and end, the SNAP dump is displayed only for that range of addresses.

The SNAP operand can degrade system performance as long as it is active.

Note:

To use this command successfully under z/OS, the data set ADASNAP must be provided in the Adabas startup JCL. For more information, read *Adabas Session Execution*.

SMGT,{ XActivate | XDeactivate } = exit-code

The XACTIVATE (XA) operand activates a loaded exit module; the XDEACTIVATE (XD) operand deactivates an active exit module.

The XA and XD operands are mutually exclusive; if one is specified on an individual SMGT command, the other cannot be.

```
SMGT,{ XNotcritical | XCritical } = exit-code
```

The XNOTCRITICAL (XN) operand changes the status of an exit from the default critical to noncritical for the functioning of the Adabas nucleus. Any abnormal termination or program check in a noncritical exit results in the exit being automatically deactivated; however, the Adabas nucleus continues to run. The disabled user exit is not recalled until it is reset. Once the exit error has been corrected, the exit can be reactivated using the XACTIVATE operand.

The XCRITICAL (XC) operand changes the status of an exit from noncritical back to the default critical for the functioning of the Adabas nucleus. Any abnormal termination or program check in a critical exit causes the Adabas nucleus to terminate.

The XN and XC operands are mutually exclusive; if one is specified on an individual SMGT command, the other cannot be.



The XLOAD (XL) operand loads a new version of an exit module.

The module-name parameter is required only for new exits. Because the default is the previous module name, the parameter is optional for exits that have previously been used. The parameter is also optional for any exit defined with a number of zero; for example, the ADACSH exit which is always named ADACSHUX.

# **SMGT Display Output Samples**

This section provides sample output for the DISPLAY operand of the SMGT command.

```
SMGT, Display = { <u>ALL</u> | EXITS | MSGBUF | PINS | SUMMARY | LAST }
```

The DISPLAY (D) operand writes status and history information about the Adabas error handling and message buffering facility to the job log and to DDPRINT:

ALL	(the default) displays all reports
EXITS	displays current user exit, hyperexit, and other exit status
MSGBUF	displays message buffering status
PINS	displays PIN routine status
SUMMARY	displays only the summary information from ALL
LAST	displays details of the most recent recovery action

This section provides sample output for the following options of the DISPLAY operand:

- DISPLAY=ALL
- DISPLAY=EXITS
- DISPLAY=MSGBUF
- DISPLAY=PINS
- DISPLAY=SUMMARY
- DISPLAY=LAST

# DISPLAY=ALL

The ALL parameter displays all of the information shown for the other parameters in the following paragraphs.

# DISPLAY=EXITS

ADANA1 00127 SMGT DISPLAY ACTIVE ADANA2 00127 SMGT ACTIVE ADANAX 00127 EXIT: UX04 MODNAME: EXIT1 STATUS: ACTIVE ADANAX 00127 EXIT: HX22 MODNAME: NULLEXIT STATUS: ACTIVE ADANO2 00127 SMGT COMMAND PROCESSED

# **DISPLAY=MSGBUF**

ADANA1 00127 SMGT DISPLAY ACTIVE ADANA2 00127 SMGT ACTIVE ADANAE 00127 MESSAGE BUFFERING IS ACTIVE ADANO2 00127 SMGT COMMAND PROCESSED

# **DISPLAY=PINS**

ADANA1 00127 SMGT DISPLAY ACTIVE ADANA2 00127 SMGT ACTIVE ADANAG 00127 PIN 0001 USES: 0000 CONDITION: 000C4000 THIS PIN VALID FOR ALL LOCATIONS ADANAG 00127 PIN 0002 USES: 0000 CONDITION: 000C1000 LOCATION: 00081C6C 0008259B (EBL2 ) ADANAA 00127 002 CONDITION PIN ROUTINES RECOVERED 000 ERRORS

```
ADANAB 00127 000 LOCATION PIN ROUTINES RECOVERED 000 ERRORS
ADANAG 00127 PIN 0003 USES: 0000 CONDITION: RSP: 017
THIS PIN VALID FOR ALL LOCATIONS
ADANAC 00127 001 RESPONSE PIN ROUTINES RECOVERED 000 ERRORS
ADANAD 00127 003 TOTAL PIN ROUTINES RECOVERED 000 ERRORS
ADANA8 00127 000 EXECUTIONS OF ABNORMAL TERMINATION HANDLER
ADANA8 00127 000 EXECUTIONS OF PROGRAM CHECK HANDLER
ADANA8 00127 000 EXECUTIONS OF RESPONSE CODE HANDLER
ADANA2 00127 SMGT COMMAND PROCESSED
```

## DISPLAY=SUMMARY

```
ADANA100127SMGT DISPLAY ACTIVEADANA200127SMGT ACTIVEADANA300127ABNORMAL TERMINATION HANDLER ACTIVEADANA400127PROGRAM CHECK HANDLER ACTIVEADANAA00127002CONDITION PIN ROUTINES RECOVERED 000 ERRORSADANAB00127000LOCATION PIN ROUTINES RECOVERED 000 ERRORSADANAC00127001RESPONSE PIN ROUTINES RECOVERED 000 ERRORSADANAB00127003TOTAL PIN ROUTINES RECOVERED 000 ERRORSADANA800127000EXECUTIONS OF ABNORMAL TERMINATION HANDLERADANA800127000EXECUTIONS OF RESPONSE CODE HANDLERADANA800127000EXECUTIONS OF RESPONSE CODE HANDLERADANO200127SMGT COMMAND PROCESSED
```

## DISPLAY=LAST

No error:

ADANA1 00127 SMGT DISPLAY ACTIVE ADANA2 00127 SMGT ACTIVE ADANA5 00127 NO ERROR CONDITIONS HANDLED ADANO2 00127 SMGT COMMAND PROCESSED

#### Error Encountered:

ADANA1 00127 SMGT DISPLAY ACTIVE ADANA2 00127 SMGT ACTIVE ADANA6 00127 LAST ERROR OCCURRED AT: 1998-07-07 14:36:18 ADANA7 00127 CONDITION: RSP: 017 LOCATION: \*N/A\* ADANO2 00127 SMGT COMMAND PROCESSED