Buffer Operation and Reporting (AFPCMD)

The AFPCMD tool provides operation and reporting functions for the Adabas Fastpath buffer. AFPCMD can be invoked online using Adabas Fastpath Online Services or it can be invoked using Natural in batch mode.

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Using AFPCMD in Batch Mode

In a batch Natural environment

- use AFPCMD as the program name;

- define the Natural printer CMPRT01; and

- execute the utility from the required SYSMW*vrs* library.

The syntax of the AFPCMD service commands is as follows:

```
command object [keyword]
```

Each line of input to the Natural batch program must contain at least a command and object.

Keywords may or may not be required depending on the particular command/object combination. The required and permissible combinations are defined later in this section.

The commands, objects, and keywords may be entered in any order. Extra, unnecessary keywords are listed with a warning but are ignored. Missing keywords are listed and the command is not executed.

Using AFPCMD in Online Mode

In online mode, AFPCMD can be invoked by:

- selecting option 4 from the Online Services Main Menu, or

- by entering the command 4 on any screen command line, or

- by entering AFPCMD on any screen command line.

The Online Printing Facility screen will appear:

```
 11:14:31     ***** A D A B A S   FASTPATH SERVICES 8.1.1 *****      2006-05-19
                     - On-Line Printing Facility -             F14000MA

 Please enter the following to specify the required report:

  Command: _____   DISPLAY, LIST, PARMS

  Objects: _____   BUFFER, JOB, AFPLOOK, TRACE, DATABASE, FILE, SUMMARY, SET
                        or ALL

 Keywords: _____
           (Press Enter to be prompted for the appropriate keywords)

  Printer: _____
  PC         for download via NATURAL CONNECTION to a PC printer or file.
  SOURCE     for output to the NATURAL source area.
  CONNECT    for output into a CON-NECT folder.
  Valid Name known to COMPLETE, NAF or any spooling system



  Command ==>
 Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help      Exit                                                  Menu
```

Online Printing Facility

You must enter a valid command, object, keywords and printer.

Note:
If you do not have the software to use a printer facility, you must use batch Natural as described earlier.

You can either enter the keywords or repeatedly press the Enter key to be prompted for keywords one at a time. When all keywords are valid, the function is executed and control is returned to this screen.

Commands

The following commands can be used to:

- communicate with the Adabas Fastpath buffer:

STOP	Stop optimization for the selected object.
START	Restart optimization for an object.
RESTART	Stop and restart the Adabas Fastpath buffer.

- print information from the current Adabas Fastpath buffer:

LIST	List a single line for each object.
DISPLAY	Print full details for each object.

- print parameter information from the configuration file:

PARMS	Print full parameter details from the Adabas Fastpath configuration file.

Objects

The following objects are listed for selection:

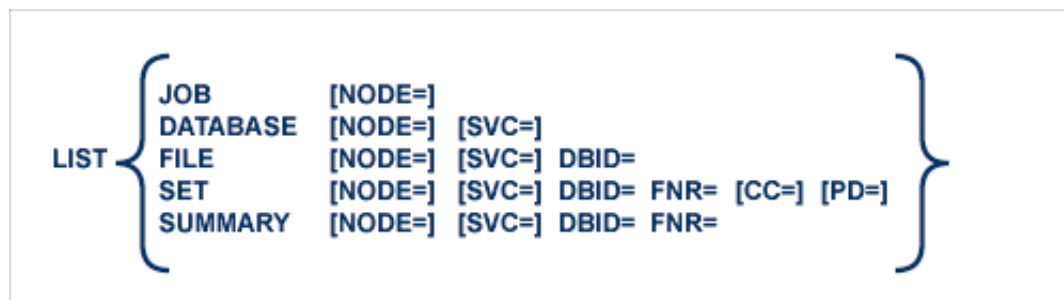| Object	Description
BUFFER	The currently accessible buffer (not valid for PARMS command).
JOB	Jobs for which Adabas Fastpath optimization has been defined.
DATABASE	An Adabas database for which Adabas Fastpath optimization has been defined.
FILE	An Adabas file for which Adabas Fastpath optimization has been defined.
SET	A set of direct access data used by Adabas Fastpath.
SUMMARY	A file/descriptor level summary of the direct access sets used by Adabas Fastpath.
AFPLOOK	Display the full details from the current AFPLOOK.
TRACE	Display the trace counters from the active Adabas Fastpath buffer.
ALL	Display all important data from an active Adabas Fastpath buffer.

Keywords

The following keywords are available:

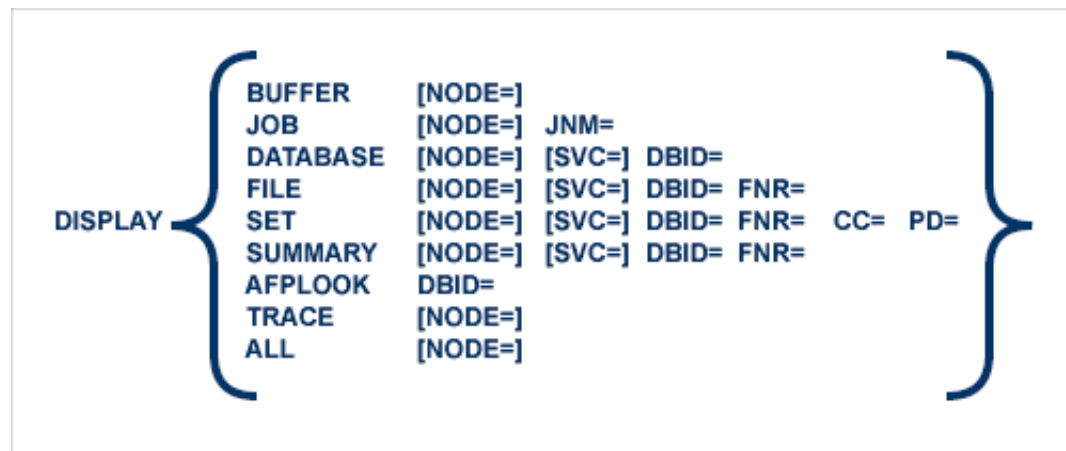| Keyword	Description
NODE	The database number of the Adabas Fastpath buffer for which statistics or actions are required. If not specified, the buffer to which the job is connected is used; if there is no connection, an error occurs. If specified, the job executing AFPCMD does not need to have a connection to any buffer.
SVC	Adabas router number. This is only valid in z/OS, MSP, and VSE/ESA environments that use multiple SVCs.
DBID	Adabas database number for which the objects are required. The value ALL is also valid except for object AFPLOOK.
FNR	Adabas file number. The value ALL is also valid.
CC	Adabas command code used to help identify direct access sets. Valid codes are: L1,L3,L9,S1,S2, or ALL.
PD	Adabas primary descriptor used to help identify direct access sets. Valid are two-character Adabas field names. ALL is also valid.
BUFF	Buffer name for PARMS (parameter print). The value ALL is also valid.
JNM	Job name defined to Adabas Fastpath. The values DEFAULT and ALL are also valid.
JTYP	Job type as defined to Adabas Fastpath. Used to uniquely identify jobs to STOP/START. See the description in section STOP/START/RESTART Commands for a list of valid job types. The value ALL is also valid.

LIST Command

The LIST command is used to obtain (from either the buffer identified by NODE or the currently accessible buffer) summary information (only) for the particular objects selected. Depending upon the object, keywords may be used to specifically identify or restrict the information to be listed.

```
              ┌                                                      ┐
              │ JOB        [NODE=]                                    │
              │ DATABASE   [NODE=]  [SVC=]                            │
  LIST  ─────<  FILE       [NODE=]  [SVC=]  DBID=                      >
              │ SET        [NODE=]  [SVC=]  DBID=  FNR=  [CC=]  [PD=]  │
              │ SUMMARY    [NODE=]  [SVC=]  DBID=  FNR=               │
              └                                                      ┘
```

Keyword	Description
NODE	Optional. When specified, identifies the database number of the Adabas Fastpath buffer required. If not specified, the buffer to which the job is connected is used; if no buffer is connected, an error message is issued.
SVC	Valid only in z/OS, MSP, or VSE/ESA environments that use multiple SVCs. If specified, information is obtained for all objects with that SVC that have been active in the current buffer.
DBID	Mandatory. Identifies the database for which file information is to be obtained. ALL can be used with this parameter to obtain information about all files active within the current buffer.
DBID and FNR	Mandatory. Identifies the database and file for which set information is to be obtained. ALL can be used for either or both parameters to obtain information about all sets active within the current buffer.
CC	Optional. Restricts the set information obtained to the Adabas command code specified.
PD	Optional. Restricts the set information obtained to the Adabas primary descriptor specified. The descriptor must be specified as a two-character Adabas field name.

DISPLAY Command

```
DISPLAY ─┤  BUFFER     [NODE=]
            JOB        [NODE=]  JNM=
            DATABASE   [NODE=]  [SVC=]  DBID=
            FILE       [NODE=]  [SVC=]  DBID= FNR=
            SET        [NODE=]  [SVC=]  DBID= FNR=   CC=  PD=
            SUMMARY    [NODE=]  [SVC=]  DBID= FNR=
            AFPLOOK    DBID=
            TRACE      [NODE=]
            ALL        [NODE=]
```

Keyword	Description
NODE	Optional. When specified, identifies the database number of the Adabas Fastpath buffer required. If not specified, the buffer to which the job is connected is used; if no buffer is connected, an error message is issued.
JNM	Used to define the job name for the DISPLAY JOB print. ALL may be specified to provide a full print for all jobs that may have been active in the current buffer.
SVC	Valid only in z/OS, MSP, or VSE/ESA environments that use multiple SVCs. If specified, information is obtained for all objects with that SVC that have been active in the current buffer.
DBID	Mandatory. Identifies the database for which file information is to be obtained. ALL can be used with this parameter to obtain information about all files active within the current buffer. The value ALL should be used with caution since its use may produce a longer print than expected.
DBID and FNR	Mandatory. Identifies the database and file for which set information is to be obtained. ALL can be used for either or both parameters to obtain information about all sets active within the current buffer. The value ALL should be used with caution since its use may produce a longer print than expected.
CC	Restricts the set statistics to the Adabas command code specified. ALL may be used to print full statistics for all sets (except as restricted by DBID and FNR).
PD	Restricts the set statistics to the Adabas primary descriptor specified. The descriptor must be specified as a two character Adabas field name. ALL may be used to print full statistics for all sets (except as restricted by DBID and FNR).

DISPLAY AFPLOOK requires the database number in DBID=. This is the only situation where ALL is not permitted.

STOP/START/RESTART Commands

The STOP and RESTART/START commands issue a request to the Adabas Fastpath buffer manager. All stop/start processing occurs in an orderly manner without affecting the status of the object in Adabas.

```
{ STOP    }  BUFFER      [NODE=]
{ RESTART }

{ STOP  }    JOB         [NODE=]  JNM=   JTYP=
{ START }    DATABASE    [NODE=]  [SVC=]  DBID=
             FILE        [NODE=]  [SVC=]  DBID=   FNR=
```

Once the STOP BUFFER command is accepted, the buffer manager initiates the stop process, and it is then no longer possible for batch services to start the buffer.

RESTART BUFFER initiates the stop process. After successful completion of the stop process, buffer initialization is started.

Keyword	Description
NODE	Optional. When specified, identifies the database number of the Adabas Fastpath buffer required. If not specified, the buffer to which the job is connected is used; if no buffer is connected, an error message is issued.
JNM	Defines the job to be stopped/started. The value DEFAULT may be used.
JTYP	Must be entered where JNM=DEFAULT or when it is possible to have duplicate job names with different job types. ALL may be used. Following is a list of the common job type entries: BATCH, CICS, CMS, COMPLETE, IMS/DC, NETWORK, SHADOW, TIAM, TSO, UTM.
SVC	Valid only in z/OS, MSP, or VSE/ESA environments that use multiple SVCs.
DBID and FNR	Mandatory. Defines the database number and file number.

ALL may be entered for any parameters. ALL should be used with caution since this may stop optimization for any number of objects.

PARMS Command

The PARMS command can be used to display the Adabas Fastpath parameters for the object selected.

Note:
The information displayed by this command is obtained from the Adabas Fastpath parameter file. Therefore, as opposed to all other AFPCMD commands, the Adabas Fastpath buffer does not need to be active for this command.

```
PARMS     BUFFER    BUFF=
          JOB       JNM=
          FILE      BUFF=   [SVC=]   DBID=   FNR=
```

Keyword	Description
BUFF	Name of the Adabs Fastpath buffer. If ALL is specified, all buffers are selected.
JNM	Job name. The value ALL is valid and prints all parameters for every job defined in the Adabas Fastpath parameter file. The value DEFAULT can be used to print all default parameters for all job types, thus eliminating the need to specify job types.
SVC	Valid only in z/OS, MSP, or VSE/ESA environments that uses multiple SVCs.
BUFF, DBID, and FNR	Mandatory for printing the file parameters. ALL is valid.

AFPCMD Summary

The following table lists all AFPCMD command, options, and keyword combinations, together with the Natural program that performs the function.

Natural Security can be applied as required.

Command	Object	Keywords	Program
LIST	JOB	NODE=	F18110P
	DATABASE	NODE= SVC=	F18120P
	FILE	NODE= SVC= DBID=	F18130P
	SET	NODE= SVC= DBID= FNR= CC= PD=	F18140P
	SUMMARY	NODE= SVC= DBID= FNR=	F18150P
DISPLAY	BUFFER	NODE=	F18280P
	JOB	NODE= JNM=	F18210P
	DATABASE	NODE= SVC= DBID=	F18220P
	FILE	NODE= SVC= DBID= FNR=	F18230P
	SET	NODE= SVC= DBID= FNR= CC= PD=	F18240P
	SUMMARY	NODE= SVC= DBID= FNR=	F18250P
	AFPLOOK	DBID=	F18290P
	TRACE	NODE=	F18270P
	ALL	NODE=	F18260P
STOP / RESTART	BUFFER	NODE=	F18510P
STOP / START	JOB	NODE= JNM= JTYP=	F18520P
	DATABASE	NODE= SVC= DBID=	F18530P
	FILE	NODE= SVC= DBID= FNR=	F18540P
PARMS	BUFFER	BUFF=	F18310P
	JOB	JNM =	F18320P
	FILE	BUFF= SVC= DBID= FNR=	F18330P