

Adabas Fastpath

Adabas Fastpath Online Services

Version 8.2.2

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This document applies to Adabas Fastpath Version 8.2.2.

Specifications contained herein are subject to change and these changes will be reported in subsequent release notes or new editions.

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1 Adabas Fastpath Online Services

This document describes Adabas Fastpath Online Services tool (SYSAFP).

- **Using Online Services**
- **System Settings**
- **Maintenance and Job History**
- **Current Activity Displays**
- **Buffer History**
- **Buffer Debug Event Controls**
- **Printing Facility (APFCMD)**
- **Special Services**
- **AFPLOOK (Optimization Sampling)**

2 Using Online Services

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This section describes the general usage of Adabas Fastpath Online Services.

Online Services Main Menu

▶ to invoke the Adabas Fastpath Online Services main menu:

- 1 logon to Adabas Fastpath online administration
- 2 enter the command MENU

The Main Menu screen appears as shown below:

```
14:06:43      ***** A D A B A S   FASTPATH SERVICES 8.2.2 *****      2011-03-04
                                     - Main Menu -                               F1MAINM1

      Code      Service
      ----      -
      0          System Settings
      1          Maintenance
      2          Current Activity Displays
      3          Buffer History
      4          Printing Facility
      5          Special Services
      6          Afplook
      7          About Adabas Fastpath
      .          Exit
      ----      -
Code ..: _


You can easily switch around the tools for Fastpath, Vista etc by use of
PF11, or use the codes COR, AFP, AVI, AAF, ATM as commands - anytime.


Command ==>

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help      Exit                               Prods Vers
```

The following services are available:

Service	Description
System Settings	Maintain Adabas Fastpath configuration file.
Maintenance	Maintain Adabas Fastpath optimization parameters.
Current Activity Displays	Display Adabas Fastpath session statistics.
Buffer History	Display Adabas Fastpath buffer history information.
Printing	Print Adabas Fastpath reports.
Special Services	Perform miscellaneous actions for the Adabas Fastpath components.
APFLOOK (Online Sampling)	Perform optimization sampling.
About Adabas Fastpath	Display Adabas Fastpath release information.

 **Note:** When you invoke Adabas Fastpath, you are logged on automatically to the highest installed, non-demo version of Adabas Fastpath Online Services. The Adabas Fastpath version is displayed in the first line of screen headers. If you have not installed the INPL from the Adabas Fastpath installation tape, "Demo" will be appended to the version in this line. From the main menu you can then use PF12 to obtain a list of installed versions, from which you may select one.

 **Note:** From the Adabas Fastpath main menu, you may switch to the online systems of Adabas System Coordinator, Adabas Vista, Adabas SAF Security or Adabas Transaction Manager by pressing PF11. This will result in a window appearing within which you can make your product selection. You may also switch from any screen with a command line by entering the appropriate three-character code (for example, AVI for Adabas Vista) as a command. You may only switch to the same version of another online system.

Navigation

You can access Adabas Fastpath Online Services screens in two ways:

- sequentially by selecting a menu option and entering it in the Option field; or
- directly by typing one of the numerical commands indicated in the following table on the command line.

For example, entering the command 1.1 on the command line directly accesses the Buffer List screen within the Parameter Maintenance function without first accessing the Parameter Maintenance menu.

Function	Object	Command
System Settings	Menu	0
	LFILE 152 Maintenance	1
	SAF Security Settings	2
Maintenance	Menu	1
	Buffer Parameters	1.1
	Buffer Add	1.1.1
	File Parameters	1.1
	File Add	1.2.1
	Client Runtime Controls	1.3
Current Activity Displays	Menu	2
	Buffer Display	2.1
	Database List	2.2
	File Lists	2.2.1
	File Set Summary List	2.2.2
	File Set List	2.2.3
	Optimized Job List	2.3
	System Job List	2.4
Buffer History	Menu	3
Online Printing (AFPCMD)		4
Special Services	Menu	5
	Buffer	5.1
	Database Component	5.2
	Local SYSAFP	5.3
	Fix Display	5.4
Online Sampling (AFPLOOK)	Menu	6
	Start AFPLOOK	6.1
	Display Files	6.2
	Display File Detail	6.2.1
	Display Summary	6.3
About Adabas Fastpath	List	7

PF Keys

Adabas Fastpath Online Services uses PF keys for various actions. Key functions are standard throughout the system, wherever possible. The PF keys that apply to each screen are indicated at the bottom of the screen.

The following keys apply throughout the system:

PF Key	Function	Description
1	Help	Invoke the help specific to the current screen
3	Quit	Quit and return to the previous screen
12	Menu	Return immediately to the main menu

The following keys apply generally, depending upon the type of action or function in use:

PF Key	Function	Description
4	Refr	Active screens: refresh the data
5	Upd	Maintenance screens: commit the update
7	Top	Lists: return to the top of the list
8	Next	Lists: move to the next page
10	Add	Maintenance screens: add an object

Online Help

Online help information can be invoked using PF1. The help screen that appears applies to the current screen and may comprise several pages. From each help screen, you can access lower level options or return to previous, higher levels. An example of a help screen follows:

```
15:40:35 ***** A D A B A S   FASTPATH SERVICES 8.2.2 - DEMO *****      2006-05-19
          H E L P for Buffer Parameter Maintenance      Page 1 of 1      F11100H1
```

This screen allows the user to select from a list of Adabas Fastpath Buffers. All buffers are shown even though they may not be accessible from the current environment. This allows any parameters to be maintained and controlled from any environment with access to the configuration file.

The SVC and DBID shown are for the Buffer; do not confuse with file and database parameters.

If the list extends to more than one page, then PF6 may be used to restart the list at the top, PF7 to move back a page, PF8 to move to the next page and PF9 to the bottom of the list.

The following options are available:

- 1 ADD - PF10 is used
- 2 MODIFY - 'm' = modification of detailed parameters
- 3 DISPLAY - 'd' = display buffer parameter details
- 4 PURGE - 'p' = deletion of buffer and any file parameters
- 5 RENAME - 'r' = rename of the buffer and any file parameters
- 6 COPY - 'c' = copy buffer and any files to a new name
- 7 FILE - 'f' = display list of file and database parameters for the buffer

Enter options 1 to 7 for Help about the individual functions, or,
 . '.' to End Help, '-' for Previous Pages

Help Screen Example

In the above example, you can navigate by entering

-	to move backwards and up a menu level; or
1 through 7	to move down a level to the function selected.

If the help screen comprises multiple pages, you can enter

+	to move to the next page; and
-	to move to a previous page until page 1, then back up a level.

3 System Settings

- System Settings Menu 10
- Configuration File (LFILE 152) Maintenance 10
- SAF Security Settings 11

This service is used to maintain the Adabas Fastpath configuration file.

System Settings Menu

Selecting option code 0 from the main menu or entering the command 0 on the command line displays the System Settings menu.

```
15:18:03      ***** A D A B A S   FASTPATH SERVICES 8.2.2 *****      2011-03-04
                - System Settings -                                F10000M1

                Code      Service
                ----      -
                1         LFILE 152 Maintenance
                2         SAF Security Settings
                .         Exit
                ----      -
Code...: _

Command ==>

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

Configuration File (LFILE 152) Maintenance

Option code 1 on the System Settings menu invokes the screen shown below:

```

18:24:45                LFILE 152 Maintenance                2006-05-19
                                U1LFILM2

Current Settings for LFILE 152:
Original LFILE = ( 152 , 135  , 18  )
Current LFILE  = ( 152 , 135__ , 18__ )
                    (effective only for this Natural session)

Default pop-up settings:
Do you want to see this window again?
- for the current SYSAFP session... N
- for future SYSAFP sessions..... N

                                PF3 Exit          PF5 Update/Confirm

```

Configuration File Maintenance

The original and current settings for the Adabas Fastpath configuration file are shown. You can enter or change the database and file number to be used for the current Adabas Fastpath configuration file.

You can also indicate whether or not you wish to have this window displayed for the current or future SYSAFP sessions.

SAF Security Settings

▶ To activate security protection for online administration

- Select *service 2* from the System Settings menu or enter the command 0.2 on a command line. The SAF Security settings window will appear:

```
15:21:56          SAF Security Settings          2011-03-04
                                                U1SAFSM1

Protect SYSAFP with SAF Security: N (Y/N)
System Coordinator Daemon Group : _____

Action if no daemon available (mark one):
    Disallow all functions: _
    Allow read functions only: _
    Allow all functions: _

                PF3 Exit          PF5 Update/Confirm
```

For an explanation of these settings refer to [Activating security protection for online administration of Fastpath](#) in the Adabas SAF Security documentation.

4 Maintenance and Job History

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- Buffer Parameters 15
- File Parameters 19
- Client Runtime Controls 26
- Job History 36

This service is used to define the Adabas Fastpath optimization parameters.

Maintenance Menu

Selecting option code 1 from the main menu or entering the command 1 on the command line displays the Maintenance menu.

```
18:21:37 ***** A D A B A S FASTPATH SERVICES 8.2.2 *****          2006-05-19
          - Parameter Maintenance -          F11000M1

          Code   Service
          ----   -
          1     Buffer Parameters
          2     File Parameters
          3     Client Runtime Controls
          .     Exit
          ----   -

Code ...: _

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

Parameter Maintenance

Select an option code to invoke the corresponding menu for the type of parameters to be defined/modified:

- [Buffer Parameters](#)
- [File Parameters](#)
- [Client Runtime Controls](#)



Note: Before proceeding, you may wish to review the section Adabas Fastpath Parameters which provides a complete list and description of each parameter type.

Buffer Parameters

Selecting option code 1 from the Parameter Maintenance menu or entering 1.1 on a command line displays the Maintain Buffer Parameters screen.

The currently defined Adabas Fastpath buffers are listed.

For an existing buffer, you can enter any of the option codes described below.

You can use PF10 to add a new buffer definition as described in section [Adding a New Buffer](#).

```

12:36:27 ***** A D A B A S FASTPATH SERVICES 8.2.2 *****          2006-05-19
          - Maintain Buffer Parameters -                               F11100M1

      <----- Buffer -----> Coordinator   Size   Direct   Read-
C   Name      SVC   DBID      Group      (k)     Access  ahead   Comments

_   AFPDAEF   255  11001   AFPGROUP   4096     ON      ON
_   AFPDA2F   255  11002   AFPGROUP   4096     ON      ON
_   AFPDA3F   255  11003   AFPGROUP   4096     ON      ON
_   V811ME01  244   8111   V811GR01   8192     ON      ON
_   V811ME02  244   8112   V811GR01   4096     ON      ON

Mark with M(odify),P(urge),R(ename),C(opy),F(iles)

End of List
Command ==>
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12
      Help           Exit  Refr                               Add           Menu

```

Maintain Buffer Parameters

The following information is provided:

C	Option code (M: modify buffer parameters, P: purge buffer, R: rename buffer, C: copy buffer, F: file parameters). For more information on the Modify function, see Modifying Buffer Parameters .
Name SVC DBID	The buffer name, the Adabas SVC used by this buffer, and the database used by this buffer.
Coordinator Group	The name of the Adabas System Coordinator group to which this buffer belongs.
Size	The memory size for this buffer.
Direct Access	Indicates whether or not direct access optimization is to be used for this buffer.

Read Ahead	Indicates whether or not read-ahead optimization is to be used for this buffer.
------------	---

Adding a New Buffer

To add a new buffer, press PF10 on the Buffer Parameter Maintenance screen. The following screen appears:

```

14:36:37          2011-07-11
      Add Buffer   F11110MB

      Size(k)    : 4096__

System Coordinator
  Group Name : RPEGRP1_
  Daemon Name: A8P17004

(Leave empty to select)
Dataspace Name: _____
Memory Pool Name: _____
Fixed Memory Addr: 00000000
(Where appropriate, e.g. VM's
DCSS name,BS2000's Memory Pool)

Command ==>
  PF1 Help   PF3 Exit   PF5 Add
    
```

Add Buffer

You must provide values for the following fields:

Size	The size of the buffer to be added.
Group Name	The name of the Adabas System Coordinator group in which this buffer is to be a member. Adabas Fastpath buffers operate as members of an Adabas System Coordinator group. The group must have already been defined using Adabas System Coordinator Online Services.
Daemon Name	The daemon name is the job name of the Adabas System Coordinator daemon under which this buffer is to operate. The daemon name may have already been defined. If not you will be prompted to define it by entering the unique Node ID by which this daemon is to be identified.

Modifying Buffer Parameters

Buffers are added with default parameters. After a buffer has been added, you can view/modify all the default settings by using the **d** or **m** option code on the Maintain Buffer Parameters screen. The following sample screen lists the general parameters for buffer A8P17004.

```

13:26:09      ***** A D A B A S   FASTPATH SERVICES 8.2.2 *****      2011-03-04
                - Buffer A8P17004 -                               F11120MA

System Coordinator Group Name: RPEGRP1_   Daemon Name: A8P17004

Adabas SVC Number:   254           Designated DBID:           17004

Last Modified:       2011-03-04 By User ID:           UKRPE
Last Buffer Address: 1587F400   Length: 001FFC00   Session: 821

----- General Parameters -----

Size(k):             2048           Minimum Buffer Size(k):   0
Maximum Jobs:        12            Set ID Length Limit:     1024
RB Length Limit:    1024           Message Level(Hex):      00
Dataspace Name:     _____
Additional encodings: All                _ (mark to alter)

Command ==>

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help      Exit      Upd           More  File      Menu

```

You can use this screen to review and, if necessary, modify any of these buffer parameters.

Refer to section Adabas Fastpath Parameters for a description of each of these parameters.

By pressing PF9 (above), you can display the detail parameters for this buffer:

```
16:00:13 ***** A D A B A S FASTPATH SERVICES 8.2.2 ***** 2008-09-11
Buffer V811ME01 F11120MB

Adabas SVC Number: 244 Designated DBID: 8111

Last Modified: 2006-05-19 By User ID: UKSJU
Last Buffer Address: 00000000 Length: 00000000 Session: 0
----- Detailed Parameters -----
Fast cache attempts: 32 Fast set create attempts: 25
Coherence Limit (per sec): 32 Suspension Period (mins): 3
Default pacing rate: 10 Set Concurrency: 2
Freespace Index: 512 Average Item Size: 256
Async coherence messages: Y

----- Operational Control -----
Log every n Minutes: 60 Keep for n Days: 30
Restart every n Hrs: 0 Restart Time: 17:30
Direct Access: ON Read-ahead: ON
Find Sx/L1: ON READ LOGICAL L3: ON
READ PHYSICAL L2: ON HISTOGRAM L9: ON

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

You can use this screen to review and, if necessary, modify any of these buffer parameters.

Refer to section Adabas Fastpath Parameters for a description of each of these parameters.

By pressing PF9 (above), you can display the debug settings for this buffer:

```

14:58:02      ***** A D A B A S   FASTPATH SERVICES 8.2.2 *****      2011-08-30
                                     Buffer A8P17004                                     F11120MD

Adabas SVC Number:   254           Designated DBID:           17004

Last Modified:       2011-08-30   By User ID:               UKRPE
Last Buffer Address:  00001000     Length: 000FFC00         Session: 2586

-----Debug Event Control (use when recommended by Software AG)-----

Event List
-----
Database terminates abnormally      Full  Partial  Start  Shut
snap  snap  again  down
-----
Set error code: 2A                  Y      N      N      N

Command ==>

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help      Exit      Upd              More  File      Menu

```

You can use this screen to set buffer debug event controls. These can be set when recommended by Software AG to produce diagnostic information. For more information, please refer to [Buffer Debug Event Controls](#).

By pressing PF9 (above), you can return to the general buffer parameter display.

File Parameters

For each Adabas Fastpath buffer, file parameters can be defined which indicate for exactly which databases/files optimization is to be performed. You can access the File Parameters maintenance function:

- from the Parameter Maintenance screen after specifying a previously defined buffer; or
- from any Buffer Maintenance screen.

By pressing PF10 on either of these buffer modify screens, you can access the File Optimization Parameters screen.

```

8:21:37 ***** A D A B A S   FASTPATH SERVICES 8.2.2 *****           2006-05-19
      - File Optimization Parameters for: Global AFP311A -           F11200MA

                                Start  End      Update
                                Time   Time    Sensitivity
C   DBID  File   SVC    Time   Time
-   11    7     254
-   12    7     254
-   13    7     254
-   14    7     254
-   71    7     254
-   111   66    254    12:00  16:00
-   193   1
-   193   2
-   193   3
-   193   4
-   193   5
-   193   7     254

Reposition
DBID: _____
File: _____

Mark with M(odify),P(urge),C(opy)

Top of List
Command ==>
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12
      Help           Exit Refr                Fwd  Bot  Add           Menu
    
```

File Parameter Selection

This screen lists, for the specified Adabas Fastpath buffer, all databases and files currently defined for Adabas Fastpath optimization.



Note: You can use the Reposition function to position to a specific database/file in the list.

Field	Description
C	Option code (M: modify file parameters, P: purge file parameters, C: copy file parameters).
DBID	Adabas Database ID.
File	Adabas File Number.
SVC	Adabas SVC.
Time	The specific time period during which Adabas Fastpath optimization is to be in effect. See parameter Start Time.
Update Sensitivity	Controls how Adabas update commands are to be processed. See parameter Update Sensitivity.

■ [Adding File Parameters](#)

- Maintaining File Parameters

Adding File Parameters

In the File Optimization Parameters screen, use PF10 to add a new file parameter. The following screen will appear:

```

12:30:07                2006-05-19
                        F11210M1

Add File Optimization Parameter

Buffer Name:  V811ME01
File:        0
              (0 = DB default)
in DBID:     _____
using SVC:   _____ (Optional)

Optional Time Window
Start(HH:MM): _____ End: _____
(Leave empty for 24 hours)

Command ==>
PF1 Help   PF3 Exit   PF5 Add ←

```

Add File Parameter

File	The Adabas file number for which Adabas Fastpath optimization is to be defined. Note: By not specifying a file number, you can define a default parameter set for all files in a database (in this case only read-ahead optimization but not direct access optimization can be applied). Individual file parameters override a database default parameter.
in DBID	The Adabas database in which the file to be optimized is located.
using SVC	The Adabas SVC number. Note: Normally, the SVC parameter is only used at z/OS, MSP, and VSE/ESA sites where multiple Adabas SVCs are required; otherwise, it need not be used. If multiple SVCs are in use, all databases defined for optimization in the same buffer must use the same SVC as the buffer (and the Adabas System Coordinator hosting the buffer).
Time Window	Optimization is only to be in effect within the specified time window. See parameter Start Time.

After a file parameter is added, the File Parameters Maintenance screen can be used to define further optimization parameters which are to be in effect for the file. This is described in the following section.

Maintaining File Parameters

The File Parameters Maintenance function can be invoked by/from:

- automatically from the Add File Parameters function
- by using option code `m` on the File Parameter Selection screen
- from an AFPLOOK File Display screen or from the File Set Summary List screen by pressing `PF5`. Similarly, hot keys on this screen can be used to access AFPLOOK and File Set Summary.
- by entering `1.2` on a command line anywhere in the system, provided that a database and file number have previously been established using this screen or one of the other functions in the hot key chain.

The following screen appears:

```

15:30:34 ***** A D A B A S FASTPATH SERVICES 8.2.2 *****                2006-03-14
- File Optimization Parameters for: A8P17004 -                                F11220MA

File: 9      DBID: 17003   SVC:                Last Modified: 2006-03-13 by: UKRPE
Start Time (HH:MM): _____ End Time: _____ Update Sensitivity: D Distributed
Initial Status:      ON      Set Limit (k):  0
Set Id Length Limit: 0      RB Length Limit: 0      Set Concurrency: 0
Expanded File:       N      Cache secure file: N      Pacing: 0
Password for secure file DA-caching (not recommended):
Additional encodings: Default      _ (mark to alter)
---- Direct Access ----- Optimization Summary ----- Read-ahead -----
L1 Get/Read by ISN  ON      | L1 Read by ISN      ON
L3 Read Logical    ON      | L2 Read Physical    ON
L9 Histogram       ON      | L3 Read Logical     ON
S1 Find Records    ON      | L9 Histogram        ON
S2 Find Sorted     ON      | S1 Find Records     ON
                   | S2 Find Sorted      ON
                   | S8 Process ISN List ON
                   | S9 Sort ISN List   ON
PF10 to Modify Direct Access      + PF11 to Modify Read-ahead

Command ==>
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12
      Help      Exit      Upd  Look      File Dir  R-a  Menu
    
```

File Optimization Parameters

The following parameters can be maintained using this screen:

Parameter	Description
Start Time, End Time	Optimization is only to be in effect within the specified time window. See parameter <code>Start Time</code> . Note: You can enable optimization for a different time window by creating a different parameter set for this file.
Update Sensitivity	Indicates how Adabas Fastpath is to process commands which result in database updating. The following values are permitted: N (none). Ignore all update commands. R (record level). Remove data by identifying single records. F (file). Remove all data for the file held in the Adabas Fastpath buffer. D (distributed record level). Use only on advice from Software AG support.
Initial Status	By setting this field to OFF, you can indicate that the file parameters being defined are not to be activated until this field is changed to ON.
Set Limit	Adabas Fastpath creates sets of direct access command models. This parameter limits the size (in k) of data items within a set.
Set ID Length Limit RB Length Limit Set Concurrency	These parameters can be used to decrease (but not increase) the values of the equivalent buffer parameters. These parameters are described in section Adabas Fastpath Parameters.
Expanded File	This field must be set to Y if the file is defined to Adabas as an expanded file. If so, direct access optimization cannot be defined for L3/L9 commands.
Cache secure file	If the file is password protected, but direct access caching is still required, then set this parameter as 'Y'. Use of secure file caching is not recommended.
Password for secure file D-A caching	If the file is password protected and direct access caching is still required, and the cache secure file parameter is set to 'Y', then the password needs to be given here. Use of this parameter is not recommended.
Additional Encodings	The setting for direct-access optimization for data of a different character encoding from that used by Adabas to store the data internally. Settings: <ul style="list-style-type: none"> ■ Default: Inherit the buffer-level setting. ■ None: Only data for Adabas internal encodings. ■ All: All the possible encodings allowed by Fastpath. ■ Single byte ascii: This additional character encoding. ■ Single byte ebcdic: This additional character encoding. ■ Double byte ascii: This additional character encoding. ■ Double byte ebcdic: This additional character encoding.
Pacing:	Controls the rate at which housekeeping is performed for this file.
Optimization Summary	The current direct access and read-ahead optimization settings for each Adabas command used for this file. Optimization can be defined for the following commands:

Parameter	Description
	<ul style="list-style-type: none"> ■ direct access: L1 , L3 , L9 , S1 , S2 ■ read-ahead: L1 , L2 , L3 , L9 , S1 , S2 , S8 , S9 <p>Note: Sx commands are generally followed by L1 commands in order to retrieve subsequent records. Although it is the subsequent L1 commands that benefit from read-ahead optimization, control is through the initiating Sx command.</p>

Use PF5 to commit all changes. Use PF3 to exit without applying any changes.

Use PF10 and PF11 to modify the direct access and read-ahead optimization parameters as described in the following sections:

- [Direct Access Optimization Parameters](#)
- [Read-Ahead Optimization Parameters](#)

Direct Access Optimization Parameters

The following screen is displayed when you press PF10 from the File Optimization Parameters screen:

```

15:42:29      ***** A D A B A S  FASTPATH SERVICES 8.2.2 *****                2006-03-14
              - File Optimization Parameters for: A8P17004 -                    F11220MB

File: 9      DBID: 17003  SVC:                Last Modified: 2006-03-13 By: UKRPE

Start Time (HH:MM):  _____ End Time: _____ Update Sensitivity: R Record
Initial Status:      ON      Set Limit (k):  0
Set Id Length Limit: 0      RB Length Limit: 0      Set Concurrency: 0
Expanded File:       N      Cache secure file: N      Pacing: 0
Password for secure file DA-caching (not recommended):
----- Direct Access Optimization -----
              On/Off   Except for:   Field level overrides
L1 Get/Read by ISN  ON
L3 Read Logical     OFF      Now Optimizes  AA  AB  ___ ___ ___ ___ ___
L9 Histogram        OFF
S1 Find Records     ON      Now Excludes   BB  ___ ___ ___ ___ ___
S2 Find Sorted      OFF

```

PF11 to Modify Read-ahead

Command ==>

```

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10---PF11---PF12
      Help      Exit      Upd   Look      File Back R-a  Menu

```

Field	Description
Command	Adabas read or query command (L1/L3/L9/S1/S2).
On/Off	Indicates whether or not optimization is to be in effect for the command. In the screen example, L1 commands (all fields), L3 commands (for fields AA nd AB only) and S1 commands (excluding S1 commands in which field BB is used as the primary descriptor) are to be optimized. The default is OFF.
Except for	The comments Now Optimizes and Now Excludes are displayed when the Enter key is pressed to illustrate the effect of field level overrides.
Field level overrides	Used to include/exclude certain fields from optimization. In the screen example, L1 commands (all fields), L3 commands (fields AA nd AB only) and S1 commands (excluding field BB) are to be optimized.

Use PF5 to commit all changes. Use PF3 to exit without applying any changes.

Read-Ahead Optimization Parameters

The following screen is displayed when you press PF11 from the File Optimization Parameters screen:

```

15:45:35   ***** A D A B A S FASTPATH SERVICES 8.2.2 *****           2006-03-14
          - File Optimization Parameters for: A8P17004 -                   F11220MC

File: 9      DBID: 17003   SVC:                Last Modified: 2006-03-14 by: UKRPE

Start Time (HH:MM):  _____ End Time: _____
Initial Status:      ON
Expanded File:       N

----- Read-ahead Optimization -----
On/Off   Except for:   Field level overrides
L1 Read by ISN      ON
L2 Read Physical   ON
L3 Read Logical    OFF      Now Optimizes   AA  _ _ _ _ _
L9 Histogram       OFF
S1 Find Records    ON      Now Excludes   CC  _ _ _ _ _
S2 Find Sorted     OFF
S8 Process ISN List OFF
S9 Sort ISN List   OFF

PF10 to Modify Direct Access

Command ==>
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12
      Help      Exit      Upd   Look      File Dir  Back  Menu

```

Read-Ahead Optimization Parameters

Field	Description
Command	Adabas read or query command (L1/L2/L3/L9/S1/S2/S8/S9).
On/Off	Indicates whether or not Adabas Fastpath optimization is to be in effect for the command. In the screen example, L1 commands, L2 commands, L3 commands (only when field AA is used as the primary descriptor) and S1 commands (excluding S1 commands in which field CC is used as the primary descriptor) are to be optimized. The default is OFF.
Except for	The comments Now Optimizes and Now Excludes are displayed when the Enter key is pressed to illustrate the effect of field level overrides.
Field level overrides	Used to include/exclude certain fields from optimization. Field overrides are not applicable for L1/L2 commands. In the screen example, L1 commands, L2 commands, L3 commands (only when field AA is used as the primary descriptor) and S1 commands (excluding S1 commands in which field CC is used as the primary descriptor) are to be optimized.

Use PF5 to commit all changes. Use PF3 to exit without applying any changes.

Client Runtime Controls

Selecting option 3 from the Parameter Maintenance screen or entering 1.3 on a command line displays the Client Runtime controls screen:

```

13:12:32      ***** A D A B A S   FASTPATH SERVICES 8.2.2 *****      2011-03-17
                - Client Runtime Controls (AFP) -                        U11300M1
                                                Reposition to Type: _____
                                                Name: _____

                Client Controls
C Type          Name          AFP    AVI    ATM    COR          Comments
_ CICS (DTR)    CICSPROD          Y              Y
_              CICTDTR          Y              Y
_              CICTDT1          Y              Y
_ Misc.DTR     UKRPE             Y    Y    Y    Y          Overrides
_ Batch       RPE*****        Y              Y    Y          Overrides
_              NATPBAT          Y              Y
_              RPEAWG          Y              Y
_              UKRPECMD        Y              Y
_ COM-LETE    DAFCODE          Y              Y
_ CICS        CICSRPE          Y              Y
_              CICSTST1        Y              Y          Overrides
_              CICST1          Y              Y          Overrides

Mark with Jobs,Modify,Purge,Rename,Copy,Overrides,Information,History

Command ==>

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help      Exit Refr          Fwd  Bot   Add  Prods Menu
      ↵
    
```

Maintain Client Runtime Controls

The following information is provided:

Field	Description
C	Option code (modify, purge, rename, copy, overrides, information, history, jobs). For more information on the Modify function, see Maintaining Client Runtime Controls .
Type	The job type.
Name	The control name. For non-DTR or API type, this will be the same as the job name.
AFP AVI ATM COR	Shows which products have Client Runtime controls defined.
Comments	Highlights existence of Session Overrides or Site Information (Info).

Press PF10 to add a new job.

Press PF11 to switch between products for maintenance of client runtime controls.

Adding Client Runtime Controls

When you press PF10 on the Maintain Job Parameters screen, the following window is displayed for adding a new job definition:

```

11:45:54      ***** A D A B A S   FASTPATH SERVICES 8.2.2 *****      2006-06-09
                - Add Client Runtime Control -                          U11310M1

Select (mark one) :
                _ Batch
                _ COM-PLETE
                _ CICS (DTR - Dynamic transaction routing)
                _ CICS (Standard)
                _ IMS (DTR)
                _ UTM (DTR)
                _ TSO
                _ CMS
                _ TIAM
                _ more choices for type or

                _ API controlled

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

Select Job Type

Name	<p>The control name.</p> <p>Note: For non-DTR and API types, the control name will be the same as the job name.</p> <p>Note: A control name can include one or more asterisks (*) to indicate a wild card. For example, the client runtime control for a type of BATCH with the name UK**E is found by any job with the name UK in positions 1-2 and E in position 5, no matter what the characters are in positions 3-4. If an asterisk (*) is the last character in a control name, the remainder of positions in the name through the eighth are padded with asterisks. Wilcards are not permitted for DTR or API types.</p>
Type	<p>The job type. Each different job type has a different characteristic so it is important to select the correct type.</p> <p>Note: If you are using CICS/MRO with dynamic transaction routing, or CICSplex, you must select the job type (DTR - Dynamic transaction routing). The standard CICS job type is used for CICS/MRO without dynamic transaction routing or for other CICS environments.</p>

	Note: If you mark the selection <i>None of the above</i> , another selection window appears with additional job types. If you need to use a job type from the second selection window, contact Software AG for advice.
--	---

Once you select a job type, a screen will ask for the job name. In this example, controls for a TSO type job are being defined.

```

10:44:09      ***** A D A B A S   FASTPATH SERVICES 8.2.2 *****      2010-12-16
                - Add Client Runtime Control -                          U11310M3

Type: TSO
Name: _____ (* for default controls for this type)

This is a standard type of runtime.

Command ==>

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help           Exit           Add                               Menu

```

Adabas System Coordinator runtime controls will then be required (see the Adabas System Coordinator documentation for further details).

```
10:45:32      ***** A D A B A S   FASTPATH SERVICES 8.2.2 *****      2010-12-16
              - System Coordinator Runtime Controls -                U11310M5
                                Operation mode (mark one):
Type: TSO                                Use normal autodetect approach: X
Name: UKRRRR__                          Enable COR even if no products: _
                                           Disable all products including COR: _

General Settings
  Statistics externally viewed using group: _____
  Refresh statistics every: _____ commands or _____ seconds
  API runtime overrides.....: N (Y/N)
  Use additional exits.....: N (Y/N)
  Maximum idle time (sec)...: _____

  Runtime messages      : Y Console message job log (default)
                        _ Local (DDMSG) file
                        _ Forward to the Daemon (DDMSG) file

Command ==>

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

Refer to the Adabas System Coordinator documentation for more information.

The group name will then be required.

```

11:42:09      ***** A D A B A S   FASTPATH SERVICES 8.2.2 *****      2011-12-07
              - System Coordinator Runtime Controls -                U11310M5

Type: TSO          Name: UKRRRR__
Operation: Normal autodetect: X Enable without products: _ Disable all: _
API runtime overrides....: N (Y/N)
Use additional exits.....: N (Y/N)
Maximum idle time (sec)..: _____

Runtime messages.....: Y Default _ Local (DDMSG) file _ Daemon (DDMSG)
Activity pulse every....: _____ commands or _____ seconds
Display (mark one).....: _ Daemon shared memory
                        _ Daemon memory
Latency (mark one).....: X Local
                        _ Group latency disk file
                        _ Daemon shared memory
                        _ Daemon memory
Group name.....: _____ (required if group/daemon services used)

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

```

Normally, the absence of client runtime controls for a job implies that optimization is not applied. Thus, you can implement optimization gradually by defining only specific jobs to receive optimization.

Alternatively, this can be reversed. Client runtime controls can be defined for default jobs so that optimization is applied to all jobs of a specific category. Then, you can specify only the jobs that are not to be optimized and those that differ from the default.



Note: A specific job definition overrides any wild card job definitions or any default definition.

Maintaining Client Runtime Controls

To maintain client runtime controls, on the client runtime controls screen, enter the option code **m** next to the job for which parameters are to be maintained. In the sample screen shown below, the job parameters for batch job **KM27WD** are displayed.

The following screen will be displayed:

```

11:36:32      ***** A D A B A S   FASTPATH SERVICES 8.2.2 *****      2012-03-01
                - Adabas Fastpath Runtime Controls -                U1132FM1

Name: KM27WD                      Last Modified: 2012-03-01
Type: Batch                        by Userid: UKRPE

System Coordinator (Buffer) Group Name.: RPEGRP1

Fastpath ON/OFF.....: ON          Read-ahead Optimization Control: BAT
Direct Access.....: ON          Read-ahead Memory Limit(k).....: 0
Tracing.....: N                Maximum read-ahead unit size(k): 32
Command Time (Hex).....: 00000000 Maximum read-ahead rate.....: 4096
End-of-job statistics..: X None
                        _ Daemon messages
                        _ File history with maximum records.....: 0

Command ==>

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

Detailed Client Runtime Controls

Parameter	Description
FASTPATH ON/OFF	If OFF is specified, Adabas Fastpath optimization will be not be performed for this job.
Job End Statistics	If Y is specified, Adabas Fastpath performance information will be sent to the operator console when a job ends.
Direct Access	If OFF is specified, no direct access optimization will be performed for the job, without regard to other parameters.
Read-Ahead Optimization Control	If OFF is specified, no read-ahead optimization will be performed. In addition, you can choose between the read-ahead factor algorithms for TP monitors (TP) or for batch (BAT). While both algorithms accelerate the factor as the sequence length increases, the batch algorithm accelerator is faster than the one for TP monitors. Normally, the default setting is the most efficient.
Read-Ahead Memory Limit	Used to restrict the memory allocated to the job for read-ahead optimization.
Maximum read-ahead unit size (k)	Used to restrict the memory allocated for a single read-ahead operation.

Parameter	Description
Maximum read-ahead rate	Used to restrict the number of records processed in a single read-ahead operation.
End-of-job Statistics	<p>One of the following options may be selected:</p> <ul style="list-style-type: none"> ■ None: No information will be displayed or saved. ■ Daemon messages: Fastpath performance information will be sent to the operator console. ■ File history: Statistics will be saved in the configuration file. <p>Note: File History is only an option for wholly named jobs (it is not an option offered for *default jobs or jobs that use a wildcard).</p>
Maximum Records	The number of records (up to 16) to be kept on file for end-of-job statistics.

Specifying Overrides to Client Runtime Controls

Overrides to the base-level client runtime controls may be specified. This provides the possibility for a greater granularity of control, allowing controls to relate specifically to particular logins, job steps or transactions.

Enter 'O' next to a job which already has AFP client controls in the Client Runtime Controls screen.



Note: Not all job types will support overrides.

Then enter PF10 to add some client runtime control overrides.

The following screen will be displayed:

```
15:54:06      ***** A D A B A S   FASTPATH SERVICES 8.2.2 *****      2010-10-21
                - Add Client Runtime Control Override -                U11381M1
```

```
Type: Batch      Name: BLAH1
```

```
Select the override type ....: _ Login id
(mark one)                      X Stepname
```

```
and specify the override name: AFPTEST1
```

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

In the example an overrides to a job of type batch is being created, for a specific step.

The following screen will be displayed:

```
15:55:56      ***** A D A B A S   FASTPATH SERVICES 8.2.2 *****      2010-10-21
              - Client Runtime Controls Override Summary -          U11380M1
```

Type: Batch

Name: BLAH1

C Type	Name	AFP	Overrides			Comments
			AVI	ATM	COR	
_ Stepname	AFPTTEST1					*Added (empty)

Mark with Modify,Purge,Rename,Copy,Information

Command ==>

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
Help Exit Refr Add Menu

Select M to modify the override client runtime controls.

The following screen will be displayed:

```
11:38:13      ***** A D A B A S   FASTPATH SERVICES 8.2.2 *****      2012-03-01
                - Adabas Fastpath Runtime Controls -                U1138FM1

Control Type : Batch          Name: KM27WD          Last Modified: 2012-03-01
Override Type: Stepname      Name: AFPTEST1      by Userid: UKRPE

System Coordinator (Buffer) Group Name.: RPEGRP1

Fastpath ON/OFF.....: ON          Read-ahead Optimization Control: BAT
Direct Access.....: ON          Read-ahead Memory Limit(k).....: 0
Tracing.....: N          Maximum read-ahead unit size(k): 32
Command Time (Hex).....: 00000000 Maximum read-ahead rate.....: 4096
End-of-job Statistics..: X None
                        _ Daemon messages
                        _ File history with maximum records.....: 0

Command ==>

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

These runtime controls may be modified and saved using PF5.

In the Client Runtime Controls screen 'Overrides' will appear in the comments.

These overrides will now apply in preference to the base-level controls for the specific login, job step or transaction.

Job History

Save Job History

That Job history information be kept may be specified in the Client Runtime Controls.

The end-of-job statistics control may be set to save the Adabas Fastpath end-of-job statistics to the configuration file.


```

11:39:15      ***** A D A B A S   FASTPATH SERVICES 8.2.2 *****      2012-03-01
                - Adabas Fastpath Runtime Controls -                U1132FM1

      Name: RPEAWG                                           Last Modified: 2012-03-01
      Type: Batch                                           by Userid: UKRPE

System Coordinator (Buffer) Group Name.: RPEGRP1

Fastpath ON/OFF.....: ON           Read-ahead Optimization Control: BAT
Direct Access.....: ON           Read-ahead Memory Limit(k).....: 0
Tracing.....: N           Maximum read-ahead unit size(k): 64
Command Time (Hex).....: 12345678   Maximum read-ahead rate.....: 4096
End-of-job statistics..: _ None
                        _ Daemon messages
                        X File history with maximum records.....: 4

Command ==>

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help           Exit           Upd                               Menu

```

A maximum of 16 history records may be specified.



Note: History is not supported for wildcard job names.

Display Job History

To display saved Job History information enter “H” on the Client Runtime controls screen next to a job which has AFP client controls.

Maintenance and Job History

```
13:12:32      ***** A D A B A S   FASTPATH SERVICES 8.2.2 *****      2011-03-17
                - Client Runtime Controls -                          U11300M1
                                Reposition to Type: _____
                                Name: _____

                        Client Controls
C Type      Name      AFP      AVI      ATM      COR      Comments
_ CICS (DTR) CICSPROD          Y              Y
_          CICTDTR      Y              Y
_          CICTDT1      Y              Y
_ Misc.DTR  UKRPE      Y      Y      Y      Y      Overrides
_ Batch    RPE***** Y              Y      Y      Overrides
_          NATPBAT          Y              Y
H          RPEAWG      Y              Y
_          UKRPECMD      Y              Y
_ COM-LETE DAEFCODE      Y              Y
_ CICS     CICSRPE      Y              Y
_          CICSTST1      Y              Y      Overrides
_          CICST1      Y              Y      Overrides
Mark with Display,Expand,Modify,Purge,Rename,Copy,Overrides,Information
History

Command ==>

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help      Exit Refr              Fwd  Bot  Add  Prods Menu
```

If history has been saved for the job then the following screen will be displayed:

```

13:26:07      ***** A D A B A S   FASTPATH SERVICES 8.2.2 *****      2011-03-17
                - Adabas Fastpath Job History -                          U113B0M1

      Name: RPEAWG
      Type: Batch
C   Date           Time           C   Date           Time
-   2011-03-03    17:33:21    -   2011-03-03    12:56:46
-   2011-03-03    15:58:31    -   2011-03-03    15:58:32
-   2011-03-03    15:58:32    -   2011-03-03    15:58:33
-   2011-03-03    15:58:34    -   2011-03-03    17:31:18
-   2011-03-03    17:33:18    -   2011-03-03    17:33:19
-   2011-03-03    17:33:19    -   2011-03-03    17:33:20

Mark to display history information

Command ==>

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

```

In the example a job of type batch has 12 history items.

An individual history item can be selected and the following screen will be displayed:

Maintenance and Job History

```
13:27:41      ***** A D A B A S   FASTPATH SERVICES 8.2.2 *****      2011-03-17
                - Adabas Fastpath Job History -                          U113B0MB

Job:   RPEAWG Type: Batch           Number: B45852           Started: 2011-03-03 15:58

----- Optimization Summary -----
Access Type           Attempts (58%)    <-----Successes (61%)

Read-ahead:                (0%)                (0%)
Direct:                    9 (40%)            4 (44%)
RCs:                      4 (18%)            4 (44%)
Others:                    9 (42%)

Total:                    22 (100%)          8 (36%)
-----

                                Over-reads:

Status: 00 00 00 00   System ID:   BATCH

Command ==>

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
                Exit                Excl                Menu
```

This information is provided in the same format as that provided by the Current Activity Displays at the Buffer level (see section [Buffer Information](#)).

Then enter PF6 to see the exclusions.

```

11:39:48      ***** A D A B A S   FASTPATH SERVICES 8.2.2 *****      2012-03-01
                - Adabas Fastpath Job History -                          U113B0MD
Job:   RPEAWG Type: Batch           Number: B43793           Started: 2012-03-01 10:59

Statistics for commands that have optimization potential but were
unable to be optimized:

C      Description                                     Count
-      Unsuitable command type:                        0
-      Disqualified:                                    0
-      Optimization was disabled:                      0
-      Multi-fetch was already set:                    0
-      Command details exceed Set-id limit:            0
-      Record Buffer exceeds the limit:                 0

Command ==>

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
                Exit                               Gen                               Menu

```

The information is provided is in the same format as that provided by the Current Activity Displays at the buffer level (see section [Buffer Information](#)).

5 Current Activity Displays

- Current Activity Displays 44
- Buffer Information 45
- Database and File Information 50
- Job Information 61
- System Job Information 65

This section describes how to obtain and use the buffer statistics available for the active Adabas Fastpath buffer.

Current Activity Displays

Active Fastpath buffers can be monitored and controlled by selecting option code 2 on the Online Services main menu or by entering the command 2 on the command line.

The Session Monitoring menu is then displayed.

```
13:34:17      ***** A D A B A S   FASTPATH SERVICES 8.2.2 *****      2011-03-04
Run-mode: 17004          - Current Activity Displays -          F1200M1

          Code   Service
          ----   -
          1     Buffer Information
          2     Database and File Information
          3     Optimized Job Information
          4     System Job Information
          .     Exit
          ----   -

Code ..: _

Perspective: 17004 A8P17004
Status: Active
          Started Mar  4,2011 at 13:33

Command ==>

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

The following fields are provided:

Field	Description
Code	Option code. The following options are available: 1: display buffer information 2: display database and file information 3: display optimized job information 4: display system job information
ABM Node ID	The Node ID for the buffer being displayed Note: You can display buffer information for a different Node ID by entering the corresponding Node ID in this field. Note: You can enter a Node ID and press Enter without selecting a code to check the validity of the node.
Status	Indicates whether or not the buffer is active and when it was last started.
Run-mode	The FASTABM/System Coordinator Node ID to which this job is connected or some text that explains why the job is not currently connected. Excluded: Job parameter is not defined. No connection: Client is unable to connect to the ABM. ENQ-J failure: An identical job is already connected. No daemon: The local daemon is not active. ENQ-B failure: Buffer is unavailable (no buffer enq). Missing: A component is missing. Invalid: A component is bad. Error: A problem with the parameters. Disconnecting: The linker has stopped.

Buffer Information

Selecting option code 1 on the Current Activity Displays screen invokes the General Information screen.



Note: You can also access this screen by entering 2.1 on the command line.

Current Activity Displays

```

11:09:26      ***** A D A B A S   FASTPATH SERVICES 8.2.2 *****      2012-02-02
Run-mode: 17004          -   General Information   -                      F12100MA

Name: A8P17004                SVC: 254  DB: 17004
Dataspace: #DSPNAME           Buffer Status : Active
Started: Feb 2,2012 at: 11:03   Ave Memory Val:
Address: 00001000 Size(k): 1023   Session Number: 2828

----- Buffer Statistics -----
Access Type          Attempts (69%)   <-----Successes (72%)

Read-ahead:          1,365 (21%)           954 (69%)
Direct:              2,454 (39%)           1,671 (68%)
RCs:                  591 (9%)              591 (24%)
Others:              1,821 (31%)

Total:                6,231 (100%)          3,216 (51%)
-----

Command ==>

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help      Exit Refr  Serv  Excl                Parm Zero Node Menu

```

The first section of this screen provides general information for the buffer. The following information is provided:

Field	Description
Name	The buffer name.
SVC	The Adabas SVC used for this buffer.
DB	The Adabas database for which this buffer is used to provide optimization.
Dataspace	The name of the dataspace when a dataspace cache is used.
Buffer Status	Indicates whether or not the buffer is currently active.
Started	The time at which the buffer was last started.
Ave Memory Val ... Session Number	These fields are reserved for Software AG use.

The next section provides the buffer statistics. The following information is provided:

Field	Description
Access Type	Attempts: the percentage of optimization attempts (optimization attempts divided by total number of commands). Successes: the percentage of successful optimization attempts (successful optimization attempts divided by number of optimization attempts).
Read-Ahead	Attempts: the number of read-ahead optimization attempts, and the attempt percentage (read-ahead optimization attempts divided by total number of commands). Successes: the number of successful read-ahead optimization attempts, and the percentage of successful attempts (successful read-ahead optimization attempts divided by read-ahead optimization attempts).
Direct	Attempts: the number of direct access optimization attempts, and the attempt percentage (direct access optimization attempts divided by total number of commands). Successes: the number of successful direct access optimization attempts, and the percentage of successful attempts (successful direct access optimization attempts divided by direct access optimization attempts).
RCs	Attempts is always equal to successes. This is the number of optimized RCs that immediately followed a direct access command (without any intervening "next" commands).
Excluded	Attempts: the number of commands which were excluded from optimization, and percentage (number of excluded commands divided by total number of commands). Note: For more information on excluded attempts, use PF6.
Total	Attempts: the total number of commands encountered by Adabas Fastpath. Successes: the total number of successful optimization attempts, and the percentage of successful attempts (successful optimization attempts divided by total number of commands).

Pressing PF6 from any of the buffer information screens displays the Excluded Command Analysis screen:

```

11:14:36      ***** A D A B A S   FASTPATH SERVICES 8.2.2 *****      2012-02-02
Run-mode: 17004          - Excluded Command Analysis -          F12100ME
                        Buffer: A8P17004 Node Id: 17004

Statistics for commands that have optimization potential but were
unable to be optimized:

C      Description                                Count
-      Unsuitable command type:                    10
-      Disqualified:                                1034
-      Optimization was disabled:                   0
-      Multi-fetch was already set:                  0
-      Command details exceed Set-id limit:          0
-      Record Buffer exceeds the limit:               0

Mark (above) to display further information about any exclusion.

Command ==>

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help      Exit  Refr  Serv      Gen      Parm  Zero  Node  Menu

```

This screen displays the following information:

Information	Description
Excluded - Reasons	The total number of commands excluded from optimization for the listed reasons. For more information, see Excluded Commands.

Selection of an exclusion reason will provide information about that exclusion.



Note: This same analysis can be displayed for jobs, databases, and files.

Pressing PF9 from any of the buffer information screens invokes the General Parameters screen:

Parameter Display

```

18:31:41 ***** A D A B A S FASTPATH SERVICES 8.2.2 ***** 2008-11-21
Run-mode: 17004 - General Parameters - F12100MF
          Buffer: Global A8P17004 Node ID: 17004
          Initial
Main Parameters      Value      Allocation      Peak Usage      Commands
Size(k)..Min: 1023  1024          1023           24%             Ignored
Maximum Jobs:       12              1              0
RB Length Limit:    2048            0
Set Length Limit:   1024            0
-----
Other-----
Fast cache attempts: 32          Fast set create attempts: 25
Coherence Limit (per sec): 1      Suspension Period (mins): 10
Default pacing rate: 10          Set Concurrency: 2
Freespace Index Entries: 512      Average Item Size: 256
                                   Async coherence messages: Y
Log every n minutes: 60          Keep for n days: 30
Restart every n Hrs: 0          Restart Time: 24:00
Direct Access:      0N          Read-ahead Processing: 0N
FIND      SX/L1:    0N          READ LOGICAL L3: 0N
READ PHYSICAL L2:  0N          HISTOGRAM L9: 0N

Command ==> _____

```

For description and use of these parameters, see section Adabas Fastpath Parameters.

The following PF keys are available throughout the series of buffer information screens:

PF Key	Name	Function
PF4	Refr	Refreshes the statistics
PF5	Serv	Invokes the function Asynchronous Buffer Services
PF5	Parms	Displays the file parameters for this buffer
PF6	Excl	Displays the Excluded Command Analysis screen
PF6	Look	Invokes AFPLOOK
PF7	Gen	Reverts to the General Information screen
PF9	Parm	Displays the General Parameters screen
PF9	More	Displays the next file or job detail display
PF10	Cntl	Displays details of the master control set for the file
PF10	Conc	Displays set concurrency information
PF10	SysJ	Toggles from the User Job Summary to the System Job Summary screen
PF10	UserJ	Toggles from the System Job Summary to the User Job Summary screen
PF10	Zero	Resets the display counts to zero and automatically refreshes

PF Key	Name	Function
PF11	Node	Displays the Buffer Statistics menu

Database and File Information

Selecting option code 2 on the Current Activity Displays screen, invokes the Database Summary screen.



Note: You can also access this screen by entering 2.2 on the command line.

For each database, a summary of activity is displayed as shown on the following example screen:

```

13:10:07      ***** A D A B A S   FASTPATH SERVICES 8.2.2 *****      2010-10-22
Run-mode: 17004          Databases from A8P17004 : 17004          F12200MA

Buffer Session: 113          Started: Oct 22,2010 12:46   Size(k): 1023

 C   DB SVC      Attempts          Optimized          Set Usage(k) Status
_ 17003 254          1391                823                34      Optimizing
_ 17015 254
                                     DB Down

Totals:          1391 100%          823 100%          34 100%
Mark with F(file),D(etail),I(nformation),S(ervices),Z(aps)

Command ==>

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help      Exit  Refr                                Node  Menu
    
```

The following information is provided on this screen:

Field	Description
Buffer Session	The buffer session number.
Started	The time at which the buffer was last started.
Size	The memory allocation for the buffer.
C	Option code. The following options are available: d: display detailed database information f: display file summary information s: perform database service (stop/start optimization).
DB	The Adabas database.
SVC	The Adabas SVC.
Attempts	The total number of optimization attempts.
Optimized	The total number of successful optimization attempts.
Set Usage	The number of direct access sets used.
Status	The status of the database.

Database Services

If the option code `s` is selected for a database, the following window is displayed:

```

13:11:00                2010-10-22
                        F12200MC

      Stop/Start Optimization
      for: Database 17003

      S Stop Optimization
      R Start Optimization
      . Exit

Code...:

Command ==>
      PF1 Help   PF3 Exit

```

Using this window, you can stop/restart optimization for a database.

If database optimization is stopped, no further optimization occurs for its files and sets. In addition, all direct access data is removed from the Adabas Fastpath buffer for sets belonging to files within this database.



Note: A similar service is available at the file and file set levels.

Detailed Database Information

If the option code d is selected for a database, the Database Details screen is displayed.

This screen contains a performance analysis for the selected database.

```

13:11:37      ***** A D A B A S   FASTPATH SERVICES 8.2.2 *****      2010-10-22
Run-mode: 17004          Database Details from A8P17004 : 17004 F12200MB

                Database: 17003 SVC: 254

----- Optimization Summary -----
Access Type          Attempts (98%)    <-----Successes (59%)

Read-ahead:          457 (32%)                320 (70%)
Direct:              815 (58%)                384 (47%)
RCs:                 119 (8%)                 119 (14%)
Others:              14 (0%)

Total:                1,405 (100%)            823 (58%)
-----
Updates:                                Over-reads:          52 (16%)

Status 1: 40 90 00 A0 Bad Response:      Lock: 00000000  DBE Addr: 16BC5638
ADABAS Vers: 813      Hex: 08010300  Location: 00000000
DBID from GCB:      Nuc ID:

Command ==>

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help      Exit  Refr      Excl      Zero Node Menu
    
```

The first section of this screen (Optimization Summary) provides optimization statistics for this database. This information is provided in the same format as that provided at the buffer level (see section [Buffer Information](#)). The statistics shown at the database level are exclusively for commands that are eligible for optimization. The excluded count therefore differs from the buffer level count.

The second section of this screen provides the following information:

Field	Description
Updates	The number of update commands processed for this database.
Over-reads	The number of read-aheads performed but not needed by the application, and the percentage of non-needed over-reads to the number of successful read-aheads. Non-needed over-reads represent overhead that may reduce the effectiveness of read-ahead optimization. In general, over-reads should not exceed 25% of read-ahead successes.
Status ... Nuc ID	These fields are reserved for Software AG use.

Excluded Command Analysis

Pressing PF6 on the Database Details screen displays the excluded command analysis for the selected database:

```

11:25:05      ***** A D A B A S   FASTPATH SERVICES 8.2.2 *****      2012-02-02
Run-mode: 17004          Database Details from A8P17004 : 17004 F12200MG

                        Database: 17003 SVC: 254

Statistics for commands that have optimization potential but were
unable to be optimized:

C      Description                                Count
-      Unsuitable command type:                  6
-      Disqualified:                              0
-      Optimization was disabled:                0
-      Multi-fetch was already set:              0
-      Command details exceed Set-id limit:      0
-      Record Buffer exceeds the limit:          0

Mark (above) to display further information about any exclusion.


Command ==>

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help      Exit  Refr          Gen          Zero  Node  Menu

```

Selection of an exclusion reason will provide information about that exclusion.

The information is provided in the same format as that provided at the buffer level (see section [Buffer Information](#)).

 **Note:** A similar analysis can be displayed from the file detail screen.

Summary File Information

If the option code `f` is selected for a database, the File Summary screen is displayed.

 **Note:** You can also access this screen by entering `2.2.1` on the command line.

This screen displays a summary of activity for each file in the selected database.

```

13:13:00      ***** A D A B A S   FASTPATH SERVICES 8.2.2 *****      2010-10-22
Run-mode: 17004                Files from A8P17004 : 17004                F12210MA

                                Database: 17003 SVC 254

C   File           Attempts           Optimized           Set Usage(k)      Status
-   -             -               -                 -                 -
-   9              1391            823                34                Optimizing
-   10             1391            823                34                Optimizing

Totals:           1391 100%          823 100%          34 100%
Mark with D(etail),F(file Sets),S(ervices)

Command ==>

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help           Exit  Refr                               Node  Menu
    
```

The following information is provided:

Field	Description
C	Option code. The following options are available: d: display detailed database information d: display detailed file information f: display file set summary s: perform file service (stop/start optimization)

Field	Description
File	The Adabas file number.
Attempts	The total number and percentage of optimization attempts.
Optimized	The total number and percentage of successful optimization attempts.
Set Usage	The number and percentage of direct access sets used.
Status	The status of the file (optimizing or not optimizing).

Detailed File Information

If option code d is selected on the File Summary screen, the File Details screen is displayed.

This screen contains optimization performance information for the selected file.

```

13:13:39      ***** A D A B A S   FASTPATH SERVICES 8.2.2 *****      2010-10-22
Run-mode: 17004          File Details from A8P17004 : 17004      F12210MB

                Database: 17003 SVC 254 File: 9
----- Optimization Summary -----
Access Type          Attempts (98%)    <-----Successes (59%)

Read-ahead:          457 (32%)              320 (70%)
Direct:              815 (58%)              384 (47%)
RCs:                 119 (8%)               119 (14%)
Others:              10 (0%)

Total:                1,401 (100%)          823 (58%)
-----
Updates:              Over-reads:          52 (16%)

Set Limit(k): 1023          Update Sensitivity: R
Set Id Length Limit: 1024   RB Length Limit: 1024   Set Concurrency: 2
Status: 00 D0   Last RC:      Next Event: 0:00   Addr: 16BCC5A0

Command ==>

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help      Exit Refr      Excl      More Zero Node Menu

```

The first section of this screen (Optimization Summary) provides optimization statistics for the file. This information is provided in the same format as that provided at the database level.

The second section of this screen provides the following information:

Field	Description
Updates	The number of update commands processed for this file.
Over-reads	The number of read-aheads performed but not needed by the application, and the percentage of non-needed over-reads to the number of successful read-aheads. Non-needed over-reads represent overhead that may reduce the effectiveness of read-ahead optimization. In general, over-reads should not exceed 25% of read-ahead successes.
Set Limit ... Set Concurrency	The current settings for various file optimization parameters. For a description of each parameter, see the section Adabas Fastpath Parameters.
Status ... Addr	These fields are reserved for Software AG use.

Pressing PF9 invokes the second File Details screen. This screen shows whether or not optimization has been defined for the Adabas command/descriptor pairs which are used to access the file.

```

10:37:21  ***** A D A B A S  FASTPATH SERVICES 8.2.2 *****                2006-05-19
          - File Details for File 19 DBID 198 SVC 240 -                F12210ME
          Expanded File N

          On/Off Adabas Field Overrides      .....Direct Access.....
          L1   On
          L3   On
          L9   On
          S1   On
          S2   On

Over-reads  Default Adabas Field Overrides      .....Read-ahead.....
          L1   On
          L2   On
          34  L3   On
          L9   On
          S1   On
          S2   On
          S8   On
          S9   On

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

File Details 2

The two sections of the screen provide optimization information for direct access and read-ahead commands respectively.

The following information is provided:

Field	Description
Command	Adabas command.
On/Off	Indicates whether or not optimization is in effect for the command.
Adabas Field Overrides	Indicates whether or not Adabas field overrides have been defined.
Over-reads	The number of read-aheads performed but not needed for the command. Non-needed over-reads represent overhead that may reduce the effectiveness of read-ahead optimization. In general, over-reads should not exceed 25% of read-ahead successes.

File Set Summary Information

If the option code `f` is entered for a file on the File Summary screen, the Set Summary screen is displayed. This screen contains summary information for each Adabas command/descriptor pairing:



Note: You can also access this screen by entering `2.2.2` on any command line.



Note: You can also access this screen using `PF9` from AFPLOOK File Details or File Parameter Maintenance. In addition, this screen gives hot key access to AFPLOOK (`PF6`) and File Parameters (`PF5`). Pressing `PF10` displays details of the master control set for the file.

Current Activity Displays

```

13:14:49      ***** A D A B A S   FASTPATH SERVICES 8.2.2 *****      2010-10-22
Run-mode: 17004          Set Summary from A8P17004 : 17004      F12220MA

          Database: 17003 SVC 254 File: 9

          Number of Items....          Memory (k)....          Growth
C CC De Sets      In Use      Peak      Optimized  In Use      Peak      Mode
_ L1      1          20         25          60         2           3
_ L1 I    1          20         25         136         2           3
_ L3 AA   1          20         25          64         3           4
_ L9 AE   1          20         25          64         4           5
_ S1 AE   3          20         59          60         3          10
_ S2 AE   2          20         34          60         3           6

Mark with D(etail),F(ull Set List)

Command ==>

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help      Exit Refr  Parms Look          Cntl  Node  Menu
    
```

The following information is provided:

Field	Description
C	Option code. The following options are available: d: display detailed set information f: display full set list
CC De	The Adabas command/descriptor pair for which information is provided.
Sets	The number of sets that have been added together to make the summary.
Number of Items	The number of items (records) in use at the present time, the peak number of items used, and the number of times items in the set were used for optimization.
Memory	The memory in use to hold the data in the sets (in k) and the peak memory usage for all sets.
Growth Mode	Fastpath regularly assesses the worthiness of all direct-access sets as being high, medium or low. Based upon this assessment Fastpath is likely to award more memory to sets assessed highly, when there is memory available, and to remove memory from the less worthy sets. The regular reassessment means the assessment of a set will quickly change according to current system activity thereby making sure the most appropriate optimization levels are maintained at all times.

File Set List

If the option code `f` is selected for a command/descriptor pair on the File Set Summary screen, the Set Summary screen will be displayed.

This screen contains an activity summary for each direct access set used by the selected command/descriptor pair.

```

13:15:28      ***** A D A B A S   FASTPATH SERVICES 8.2.2 *****      2010-10-22
Run-mode: 17004                      Set Summary from A8P17004 : 17004      F12230MA

          Database: 17003 SVC 254 File: 9      CC: S1 De: AE

          Number of Items.....          Memory (k).....          Growth
C  SSID      In Use      Peak      Optimized  In Use      Peak      Mode
-   3         20         25         60         3         4
-   1         17         17
-   9         17         17

Mark with D(etail),S(start/stop)

Command ==>

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help      Exit  Refr                          Cntl  Node  Menu

```

The following information is provided:

Field	Description
C	Option code. The following options are available: d: display detailed set information s: start/stop optimization for the set
SSID	SSID (Short Set ID) is a number used internally to identify different sets. The lower the number, the older the set.
Sets ... Ratings	The remaining fields on this screen are as described in the previous section File Set Summary .

Detailed Set Information

The Set Detail screen can be invoked by selecting the option code d for a set or pressing PF10 on the File Set Summary screen:

```

13:15:57      ***** A D A B A S   FASTPATH SERVICES 8.2.2 *****      2010-10-22
Run-mode: 17004          Set Detail from A8P17004 : 17004          F12230MB

                Database: 17003 SVC 254 File: 9
Command: S1      Primary Descriptor: AE          SSID: 3

Items   - Optimized:          60                Growth Mode:
         Current:             20 Added:          20      Removed:
         Peak:                25 RLU:           Overwrites:
         Free:                 5 Resets:         Collisions:
Memory  - Used(k):           3 Peak(k):         4      Free(k):
Status: 00 04 0E 08          Expansion:      1      Acc.Mask Entries    2
Used    FB:      1 RB:       Indexes:         3      Address:           16BDCF28
Lengths: SB:      8 VB:      20 Code:          Lock:           00000000
SetID Length: 21
Reject:
SB AE,20,A.
FB .

Command ==>

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help      Exit Refr          Conc      Menu
    
```

The following information is provided:

Field	Description
Growth Mode	Fastpath regularly assesses the worthiness of all direct-access sets as being high, medium or low. Based upon this assessment Fastpath is likely to award more memory to sets assessed highly, when there is memory available, and to remove memory from the less worthy sets. The regular reassessment means the assessment of a set will quickly change according to current system activity thereby making sure the most appropriate optimization levels are maintained at all times.
Items ...	Optimized: the number of successful optimizations from data records in the set. Added: the number of times a data record was inserted into the set. Collisions: the number of times a set was inaccessible because concurrency for the set was exhausted. Current: the number of data records currently in the set. Peak: the highest number of data records which have been in the set.

Field	Description
	Free: the number of free data item areas currently available. Removed: the number of data records which have been removed from the set. RLU: the number of times an individual data record was removed from the set as a result of a database modification command (for example, update, insert, delete). Overwrites: the number of times a new data record was inserted by overwriting an existing record because no free area was available. Set Resets: the number of times a complete set was emptied.
Memory	The memory in use to hold the data in the sets (in k) and the peak memory usage for all sets.
Status ... Reject	These fields are reserved for Software AG use.

Press PF10 to display set concurrency information.

Job Information

Selecting option code 3 on the Current Activity Display screen, displays the Job Summary screen.



Note: You can also access this screen by entering 2.3 on the command line.

This screen displays a summary of activity for each job.

Current Activity Displays

```

13:17:32      ***** A D A B A S   FASTPATH SERVICES 8.2.2 *****      2010-10-22
Run-mode: 17004                Job Summary for A8P17004 : 17004      F12300MA

Buffer Session: 113           Started: Oct 22,2010 12:46      Size(k): 1023

C Job Name Number Job Type      Attempts      Optimized Mem(k) Status
_ UKRPE      U54670 TSO                1391          823      Active
-                                     Unused
-                                     Unused
-                                     Unused
-                                     Unused
-                                     Unused
-                                     Unused
-                                     Unused
-                                     Unused
-                                     Unused
-                                     Unused
-                                     Unused
-                                     Unused
-                                     Unused
-                                     Unused

Mark with D(etail),S(ervices)

Command ==>

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help           Exit  Refr                               Sysj  Node  Menu
  
```

The following information is provided:

Field	Description
C	Option code. The following options are available: d: display detailed job information s: stop/start optimization
Job Name Number Type	The job name, job number and job type.
Attempts	The number of optimization attempts.
Optimized	The number of successful optimization attempts.
Memory	Memory used by the job.
Status	The status of the job (active, unused, disconnected). Note: Status Disconnected indicates that a job is no longer being optimized, usually because it has completed. The job details can still be displayed until the job area is reused.

Press PF10 to display the System Job Summary screen.

Detailed Job Information

Selecting option code d for a job on the Job Summary screen displays the Job Details screen.

```

13:19:03      ***** A D A B A S   FASTPATH SERVICES 8.2.2 *****      2010-10-22
Run-mode: 17004                Job Details from A8P17004 : 17004      F12300MB

Job:      UKRPE Type: TSO          Number: U54670          Started: Oct 22,2010 12:29

----- Optimization Summary -----
Access Type          Attempts (64%)    <-----Successes (59%)

Read-ahead:          457 (21%)                320 (70%)
Direct:              815 (38%)                384 (47%)
RCs:                 119 (5%)                 119 (14%)
Others:              709 (36%)

Total:                2,100 (100%)            823 (39%)
-----
Memory(k):           RA Memory:           Over-reads:           52

Status: 00 00 00 00   System ID:      TSO   Area Address: 16BBAB88

Command ==>

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help      Exit  Refr      Excl      More Zero Node Menu

```

The first section of this screen (Optimization Summary) provides optimization statistics for this job. This information is provided in the same format as that provided at the buffer and database level (see section [Buffer Information](#)).

The following additional fields are displayed:

Field	Description
Memory	The total memory, in kilobytes, of all memory classes used for this job.
RA Memory	The total memory, in kilobytes, of all read-ahead areas allocated to this job.
Over-reads	The number of read-aheads performed but not needed by this job, and the percentage of non-needed over-reads to the number of successful read-aheads. Non-needed over-reads represent overhead that may reduce the effectiveness of read-ahead optimization. In general, over-reads should not exceed 25% of read-ahead successes.
Status ... Address	These fields are reserved for Software AG use.

PF9 on the Job Details screen can be used to display the second job detail screen.

```

11:41:09      ***** A D A B A S   FASTPATH SERVICES 8.2.2 *****      2012-03-01
Run-mode: 17004                Job Details from A8P17004 : 17004      F12300MC

Job:   RPEAWG Type: Batch      Number: B43793                Started Mar  1,2012 10:59

Job Information-----
CID Areas:  In Use: 0          Peak: 1

Client Runtime Controls-----
System Coordinator (Buffer) Group Name: RPEGRP1

Fastpath ON/OFF.....: ON          Read-ahead Optimization Control: BAT
Direct Access.....: ON          Read-ahead Memory Limit(k).....: 0
Tracing.....: N                Maximum read-ahead unit size(k): 32
Command time (Hex)...: 12345678   Maximum read-ahead rate.....: 4096
End-of-job-statistics:  None
                        Daemon messages
                        X File history with maximum records.....: 4

Command ==>

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help      Exit  Refr      Excl  Gen                        Node  Menu
    
```

The first section of this screen (Job Information) provides the following information:

Field	Description
CID Areas	In Use: the number of Command ID areas currently in use. Peak: the highest number of Command ID areas which have been concurrently in use.

The second section contains the current values for the client runtime controls. See the section Adabas Fastpath Parameters for descriptions of these parameters.



Note: The parameter values currently being used by the job are displayed. Once a job is disconnected, these values are reset automatically to the default parameter values.

PF6 can be used to display the Excluded Command Analysis screen as described in the section [Buffer Information](#).

System Job Information

Selecting option code 4 on the Current Activity Display screen invokes the System Job Summary screen.



Note: You can also access this screen by entering 2.4 on the command line.

This screen contains a list of system job areas for the active Adabas Fastpath buffer. This is normally the Asynchronous Buffer Manager task and any database components.

```

15:53:10  ***** A D A B A S   FASTPATH SERVICES 8.2.2      ***** 2008-11-26
Run-mode: 17004                Jobs for A8P17004 : 17004                F12400MA

Buffer Session: 567           Started: Nov 26,2008 10:25           Size(k): 1023

C   Job Name Number Job Type   SVC DB   Nuc ID           Status
-   -   -   -   -   -   -   -   -   -   -   -   -   -
-   N8C81003 C34417 AFPADA   254 17015        DB down
-   A8P17004 C32991 AFPABM   254 17003        Active
-   -   -   -   -   -   -   -   -   -   -   -   -   -

Mark with D(etail),S(ervices)

Command ==>

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help           Exit                               UserJ Node  Menu

```

The following information is provided:

Field	Description
C	Option code. The following options are available: d: display the Asynchronous Buffer Services menu s: display the Database Component Services menu Note: These services are described in the section Special Services .
Job Name Number Type	The job name, job number and job type.
SVC	The Adabas SVC used for this job.
DB	The Adabas database used for this job. This is the "external" DBID (DBID used by the application program).
Nuc ID	This ID is used by a member of Adabas Parallel/Cluster Services. These services may have "internal" DB numbers.
Status	The status of the job (active, unused).

PF10 can be used to display the Optimized Job Summary screen.

6

Buffer History

This function can be used to display the Adabas Fastpath buffer history information that has been recorded in the Adabas Fastpath configuration file either

- automatically (see the Adabas Fastpath Log Parameter) or
- by using the log function of **Adabas Fastpath Special Services**.

If history logs are present for more than one buffer, selecting option code 3 from the main menu or entering the direct command 3 from the command line displays the following screen:

```
10:22:42      ***** A D A B A S   FASTPATH SERVICES 8.2.2 *****      2010-10-25
                - Buffer History -                                     F13000MA
```

Please mark to select Buffer for History Display

- AFP17004 Global
- A8P17004 Global
- A8P17013 Global

Command ==>

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

Buffer History Selection

Mark the buffer for which history information is to be provided. The following Buffer History Available screen appears:



Note: This is the first screen displayed if history logs exist for only one buffer.


```

10:24:38      ***** A D A B A S   FASTPATH SERVICES 8.2.2 *****      2010-10-25
              - Buffer History Available for Global A8P17004 -      F13100MA

  Sel   Buffer  <---Logged at--->   <-----Optimization----->
        Session Date       Time                Attempts      Optimized
  ___   104    Oct 18,2010 13:37   Direct-access      105           90
        Read-ahead
  ___   104    Oct 18,2010 14:37   Direct-access      105           90
        Read-ahead
  ___   104    Oct 18,2010 15:14 E   Direct-access     1039          593
        Read-ahead      462           322
  ___   105    Oct 18,2010 15:17 E   Direct-access
        Read-ahead              5             2
  ___   106    Oct 18,2010 16:17   Direct-access
        Read-ahead              6             2
  ___   106    Oct 18,2010 17:17   Direct-access
        Read-ahead              6             2

Select using S or an SS pair, Purge using P or a PP pair.
Position to: Oct 18,2010

Command ==>

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help      Exit      Reset Top   Next      Menu

```

Buffer History

This screen displays a two-line summary for each log record of the selected (or default) buffer. The summary includes the following information:

Column	Description
Sel	<p>The following option codes can be used to process one or more lines (records) of the log:</p> <p>s: display details for one log record. ss: display the difference in statistics between a pair of log records. p: purge a single log record pp: purge from the first to the last marked log records</p> <p>You must enter the options ss pp in pairs. The second element of the pair need not be on the same screen but must be within the same buffer session.</p> <p>Use PF6 to clear all entries in the Select column.</p>
Buffer Session	The buffer session number. Certain operations cannot be performed across sessions.
Logged at Date/Time	The date and time the log was recorded.

Buffer History

Column	Description
E M	E indicates end-of-job. M indicates a special log request using the function Special Services.
Direct Access	The number of attempted and successful direct access optimizations for each logging period.
Read-Ahead	The number of attempted and successful read-ahead optimizations for each logging period.

Use PF8 to display the next page of log records.

If option code `ss` is marked for a pair of records, the following History Interval screen appears. This screen displays the statistics for the time interval specified in the screen heading.

```

16:24:40      ***** A D A B A S   FASTPATH SERVICES 8.2.2 *****      2012-03-07
History Interval -          Jan 13,2012 14:34 to 15:06                      F13110MA

Name: A8P17004                      SVC: 254 DB: 17004
Dataspace:                          Buffer Status : Buffer Stopped
Started:  Jan 13,2012   at: 12:34     Ave Memory Val: 1245
Address:  00001000 Size(k): 1023     Session Number: 2785

----- Buffer Statistics -----
Access Type          Attempts  (98%)  <-----Successes  (99%)
Read-ahead:         13      (0%)           7      (53%)
Direct:             54,816  (98%)          54,797 (99%)
RCs:                1       (0%)           1       (0%)
Others:             594     (2%)
Total:              55,424 (100%)          54,805 (98%)
-----

Command ==>

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help      Exit      Excl Gen  Buff Parm      Menu

```

History Interval Logs

The information contained on this screen is exactly like the General Information screen available directly from this screen by pressing PF7. The excluded command analysis, buffer memory and parameter screens can also be invoked by pressing PF6, PF8, and PF9, respectively. All of these screens are described in the section [Buffer Information](#).

If, on the Buffer History screen, you marked a record with an *s* instead of marking a pair, the following screen will appear displaying the statistics at the time the history log was recorded:

```

16:25:31      ***** A D A B A S   FASTPATH SERVICES 8.2.2 *****      2012-03-07
Buffer History - Logged      Jan 13,2012 17:32                          F13110MA

Name: A8P17004                      SVC: 254 DB: 17004
Dataspace:                          Buffer Status : Active
Started:  Jan 13,2012   at: 16:32    Ave Memory Val:
Address:  00001000 Size(k): 1023     Session Number: 2787

----- Buffer Statistics -----
Access Type           Attempts   (4%)   <-----Successes (45%)

Read-ahead:          22   (2%)           12   (54%)
Direct:              20   (2%)           5    (25%)
RCs:                 4    (0%)           4    (20%)
Others:              722  (96%)
Total:                768 (100%)           21   (2%)
-----

Command ==>

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help           Exit           Next Excl Gen  Buff  Parm  ZNext           Menu

```

Buffer History

This screen displays the details for a single log record. PF keys can be used to display the next sequential log record until the end of session is found:

PF Key	Displays...
PF5 Next	The statistics from the current log record.
PF10 Next	The difference between the current and previous log records. The effect of this function varies depending on the type of information being displayed. This key can be used to skip from one statistics time slice to the next showing the statistics achieved in that time slice (taking the difference between one time slice and the next rather than simply displaying the details of each time slice).

Other PF keys provide direct access to the Excluded Command Analysis, General Information, Buffer Memory, and Parameter screens, which are described in the [Buffer Information](#) section.

7 Buffer Debug Event Controls

- Setting Buffer Debug Event Controls 74

Buffer debug event controls are used to help diagnose problems with the use of the Fastpath cache, they are inactive by default.. Please use only under guidance from Software AG.

These controls can SNAP some or all of the Fastpath cache to a file defined in the daemon (CORDUMP) and/or RESTART/STOP the cache automatically too. In order to react to an event you must choose an action to follow and, if a SNAP (full or partial) is requested you must also introduce the CORDUMP file to the daemon job execution control as necessary (according to the operating system you use).

A SNAP will only appear if an exact match for the event(s) you have chosen occurs. The event reaction will only react once in a daemon execution, after that it is automatically disabled.

▶ **To set a buffer debug event you must do the following:**

- 1 Ensure that the CORDUMP file is available to your COR daemon job.
- 2 Set the controls for the buffer event to be debugged. Press PF5 to save these details. For detailed information see: [Setting Buffer Debug Event Controls](#)

Setting Buffer Debug Event Controls

The Buffer debug event controls are set in the Buffer parameters. In SYSAFP Maintenance, modify the buffer parameters and use PF11 to scroll to the Buffer Debug Event Controls to see the following screen:

```

15:26:33      ***** A D A B A S      FASTPATH SERVICES 8.2.2 *****      2011-08-30
                                           Buffer A8P17004                                           F11120MD

Adabas SVC Number:   254           Designated DBID:           17004

Last Modified:       2011-08-30   By User ID:                 UKRPE
Last Buffer Address:  00001000     Length: 000FFC00           Session: 2586

-----Debug Event Control (use when recommended by Software AG)-----

Event List
-----
Database terminates abnormally          Full  Partial  Start  Shut
snap   snap   again  down
-----  ----  ----  ----
Database terminates abnormally          N     N     Y     N
Set error code: 2A                      N     Y     N     N

Command ==>

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help           Exit           Upd                   File Next Menu

```

For each event in the Event List up to 2 actions can be chosen; a full/partial SNAP and/or the RE-START/STOP of the Fastpath cache.

Action	Description
Full SNAP	A SNAP of the cache will be written to CORDUMP
Partial SNAP	A portion of the cache will be written to CORDUMP. Which portion of the cache is written will depend on the type of event.
Start again	The Fastpath cache will be restarted.
Shutdown	The Fastpath cache will be stopped. The COR daemon, and other products, will remain active.

8 Printing Facility (AFPCMD)

- Using AFPCMD in Online Mode 78

The function AFPCMD provides operating and reporting functions for the Adabas Fastpath buffer. AFPCMD can be used interactively in online mode or it can be invoked using Natural in batch mode.



Note: This section describes only the basic usage of AFPCMD using Online Services. For a complete description, see the section AFPCMD.

Using AFPCMD in Online Mode

In online mode, AFPCMD can be invoked by:

- selecting option code 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 8.2.2 *****                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. To print to PC or a printer, print file 7 must be defined correctly.

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.

Refer to the following sections for information on commands, objects and keywords:

- AFPCMD Commands
- AFPCMD Objects
- AFPCMD Keywords

9 Special Services

▪ Special Services Menu	82
▪ Asynchronous Buffer Services	83
▪ Database Component Services	84
▪ Local Services	85
▪ Fix Display	88

This section describes the special services functions provided by Online Services.

Special Services Menu

Selecting option code 5 from the Online Services main menu or entering the command 5 on the command line displays the Special Services menu.

```

10:45:13      ***** A D A B A S   FASTPATH SERVICES 8.2.2 *****      2010-10-25
                - Special Services -                                F15000M1

                Code      Service
                ----      -
                1      Asynchronous Buffer Services
                2      Database Component Services
                3      Local SYSAFP Services
                4      Fix Display
                .      Exit
                ----      -

Code ...: _

Command ==>

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

The following services are available, and can be invoked using the appropriate option code.

Code	Service	Provides communication facilities for the...
1	Asynchronous Buffer Services	selected active Adabas Fastpath buffer.
2	Database Component Services	database(s) for which Adabas Fastpath has been installed.
3	Local SYSAFP Services	job (a TP monitor, for example) in use when executing the functions.
4	Fix Display	display of applied fixes for all Adabas Fastpath components.

Asynchronous Buffer Services

Selecting option code 1 from the Special Services menu or entering the command 5.1 on any command line displays the following window:

```

10:45:53                2010-10-25
                        F15100MA
Special Services
for ABM Node Id: 17004 A8P17004
Status Active

R Restart..(Stop/Start)
S Stop.....(Terminate)
N Newcopy..(and Restart)
P Snap
L Log
I ABM Information
. Exit
Code..: _

Command ==>
PF1 Help  PF3 Exit

```

Asynchronous Buffer Services communicates with the buffer indicated at the top of the window. If the job is connected to a buffer, that buffer is shown when the window opens. You can override the default buffer by changing the database number to the one defined for the required buffer. All actions are a request to the Asynchronous Buffer Manager (AFPABM) to perform the function.

Option Code	Description
R: Restart	Stop the buffer in an orderly fashion, and then restart it again. Both primary and alternate configuration files (if used) must be available for this operation. (See note 1)
S: Stop	The Fastpath cache management service within the System Coordinator daemon is stopped. The configuration file and alternate (if used) must both be available for this operation. Note: This operation is not reversible without a complete recycle of the daemon.
N: Newcopy	Reload the Adabas Fastpath modules for the buffer and every other component connected to the buffer. AFPABM also performs a buffer restart. Both primary and alternate configuration files (if used) must be available for this operation. (See note 1)
P: Snap	Produce a snap dump of the buffer.
L: Log	Write a statistical log to the Adabas Fastpath configuration file.

Option Code	Description
I: ABM Information	Display general diagnostic information for the Adabas Fastpath buffer job.



Notes:

- Multi-task clients (such as RPC and NDV servers) are not compatible with the dynamic Restart or Newcopy. Such jobs should be stopped before issuing the Fastpath operator command and restarted after the action has completed.

Database Component Services

Selecting option code 2 from the Special Services menu or entering the command 5.2 on any command line displays the following window:

```

10:46:24                2010-10-25
                        F15200MA

Special Services for:-
  DBID: 0____
SysCo Node: 17004

I Connection Information
. Exit
Code...: _

Command ==>
PF1 Help  PF3 Exit  PF5 Action
    
```

The following fields are provided:

Field	Description
DBID	Database Component Services provides services for the database indicated at the top of the window. This can be any active database for which Adabas Fastpath has been installed. If the function is invoked from the System Job Summary screen as in the above example, the database for which communication is required is already established and is shown on the screen. Otherwise, the database number must be entered.
SysCo Node	The Adabas System Coordinator Node ID. This is only required for clustered databases: ■ If the Node ID is known, a screen follows showing a cluster map for the database.

Field	Description
	■ If the Node ID is not known, you must enter it in this field.
Option Code	The following option code may be used: I: Connection Information. Displays connection information between the selected database and the Adabas Fastpath buffer to which the database is connected. See the Connection Information screen as described in the next section.

Local Services

Selecting option code 3 from the Special Services menu or entering the command 5.3 on any command line displays the following window.

Local Services provides service request communication for a local job with the TP monitor in use.

```

10:47:10                2010-10-25
                        F15300MA

Special Services for:
  Local Job UKRPE

  I Connection Information
  S Job Statistics
  C ReConnect
  D Disconnect from Buffer
  N Newcopy
  . Exit
Code...: _

Command ==>
          PF1 Help   PF3 Exit

```

The following fields are available:

Field	Description
Local Job	The local job for which the request is to be made.
Option Codes	The following option codes may be used: I: Connection Information. Displays connection information for the job. S: Job Statistics. Displays statistics for the local job when it is not connected to a buffer because read-ahead optimization may be taking place even when the buffer is not active. C: Reconnect. Attempts to connect to a buffer for the local job.

Field	Description
	<p>D: Disconnect. Disconnects from the buffer for the local job.</p> <p>N: Newcopy. Temporarily disconnects the local job before reloading the Adabas Fastpath modules. Software AG does not recommend using Newcopy from Local SYSAFP Services. The preferred method is to use Newcopy from Asynchronous Buffer Services.</p>

Connection Information

The Connection Status screen, which can be accessed from any of the Service options, displays connection status information:

```

10:47:50      ***** A D A B A S   FASTPATH SERVICES 8.2.2 *****      2010-10-25
Run-mode: 17004          - Connection Status Information -      F1CNXSMA

***** Information Request *****
Status Indicators: 00 1E 00 20          Owner: 0000000000000000
Jobname: UKRPE      No: U12954   Type: 29   Amode: 00

Address List: 2633C1D8          Initialization Code: ok          RC:
Linker Stub: 263E3960          Retry Count: 1000   Limit: 1000
Connection-0: 2642F420          Linker SVC: 254
Connection-1: 263EDDA0          Event:
Connection-X: 263E75A0          System File: SVC: 254          DB: 17003
AFPKRN      A6457F78          FNR: 34
          Buffer: SVC: 254          DB: 17004
          Poolname:
Anchor:      16BAE400          Pool Address: 00000000
Session:    16BBB3B8          User Exit 4 Routine:
Reserved:   0000000000000000   CLOGIO: 00

This Information Screen may be useful to Software AG Technical Support

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
          Exit                               CodeI
    
```

Connection Information Screen

Although this screen is primarily intended for Software AG use to assist in identifying connection problems, some of the following information may be helpful to users.

Field	Description
Linker Stub	Load address of the Adabas Fastpath module that was linked with the Adabas link routine.
AFPKNR / AFPDEP / AFPCFG	Load addresses of the Adabas Fastpath modules. A zero address indicates that the module could not be found.
Anchor	Address of the Adabas Fastpath buffer pool, if it could be located. This address is usually zero if connection could not be made.
Session	Address of the job area (BSA) within the Adabas Fastpath buffer.
Initialization Code	"ok" indicates connection was successful. If connection was unsuccessful an error code relating to job initialization is shown.
RC	If there is an error when reading the Adabas Fastpath configuration file, this field shows the Adabas response code received.

Job Statistics

The Local Job Statistics screen can be invoked by selecting option code S from the Special Services for Local Job window:

```

10:52:38      ***** A D A B A S   FASTPATH SERVICES 8.2.2 *****      2010-10-25
                - Local Job Statistics -                          F15310MA

Job:      UKRPE Type: TSO      Number: U12954      Started: Oct 25,2010 10:21

----- Optimization Summary -----
Access Type      Attempts (15%)      <-----Successes (90%)

Read-ahead:      2,071 (10%)      1,776 (85%)
Direct:          815 (4%)      800 (98%)
RCs:             314 (1%)      314 (38%)
Others:         15,742 (85%)

Total:           18,942 (100%)      2,890 (15%)
-----

Memory(k):      RA Memory:      Over-reads:      99

Status: 00 1E 00 20      System Id:      TSO      Area Address: 2642F420

Command ==>

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help      Exit Refr      Menu

```

This screen is useful when the job is not connected to a buffer to show the read-ahead optimization, which can continue even when the buffer is not connected.

The information provided is in the same format as that described in the section [Detailed Job Information](#).

Fix Display

▶ **To display the applied fixes**

- Select option 4 from Special Services menu.

```
08:36:03      ***** A D A B A S   FASTPATH SERVICES 8.2.2 *****      2010-04-23
              - Fix Display: AFP 8.2.1 Patch: 0000 06/22/09 -      U1FIX0M1
              Local client job running this current session

C Patch Reference Type Description
_ 0000 AW821001 EXE For example only

Mark with any character for detail

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

Initially the screen will list all fixes applied to the Adabas Fastpath kernel in the local client environment.

You can select other display perspectives (e.g. Coordinator daemon or Adabas database) by using PF4. You can also directly list the applied fixes for Adabas System Coordinator, Adabas Vista, and Adabas Transaction Manager by using PF11 to first select the appropriate product.

10 APFLOOK (Optimization Sampling)

- APFLOOK Menu 90
- Starting an APFLOOK Session 92
- APFLOOK File Summary 93
- APFLOOK Summary Display 96

AFPLOOK can be used to determine whether or not Adabas Fastpath optimization for specific databases or files should be used. This section describes how to use AFPLOOK in online mode.



Note: This section describes only the usage of AFPLOOK using Online Services. For a complete description, see the section AFPLOOK.

AFPLOOK Menu

Selecting option code 6 from the Online Services main menu or entering the command 6 on the command line displays the AFPLOOK Services menu:

```
18:10:59 ***** A D A B A S FASTPATH SERVICES 8.2.2 - DEMO ***** 2006-05-19
- Afplook Services - F16000MA

Code Service
-----
1 Start Afplook
2 File Display
3 Display Summary
4 Freeze/Pause Afplook
5 Release Afplook
. Exit
-----
Code ..: _

DB ID: 131 NUC131
Status: Active
User= UKPAL May 19,2006 17:52
System Coordinator Node: _____

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

AFPLOOK Menu

The following fields are provided:

Field	Description
Code	<p>For a specified database, the options provided can be used to start, stop, release, or display information for the database as a whole or for individual files.</p> <p>Note: Adabas Fastpath automatically detects when a database supported by a cluster of Adabas nuclei, either in a single operating system image (ADASMP) or across multiple operating system images (Adabas Cluster Services), has been selected for APFLOOK. In this case, a separate menu screen is displayed so that you can indicate which nucleus is to be used.</p>
DB ID / Status / User	<p>These fields contain:</p> <ul style="list-style-type: none"> ■ the number of the database for which APFLOOK is currently active. This number may have been carried forward from a previous action. ■ the name of the database job. ■ the APFLOOK status. ■ the user who started APFLOOK for the database, and when it was started (date and time).
System Coordinator Node	<p>The Adabas System Coordinator Node ID is required for a clustered database only when it is not already known by the system. If this is the case, you are prompted to enter the Node ID.</p>

Because only one APFLOOK can be active for a database at one time, a strict record of events is needed to establish sequence.

The screen example shows the status of database 131 as *active*. To display the APFLOOK status of a different database, you may change the database number and press Enter. This may show that the new database is *not active* or it may say "AFPADA not installed". Otherwise, the name changes and the status of the new database is displayed.

- Initially, APFLOOK is at status *released* : a start can only be invoked when this status is current.
- Once at status *started*, APFLOOK can be stopped (but not directly released).
- Status *stopped* can then be changed to released, at which point all statistics are discarded.

Statistics, both general and for files, can be displayed when the status is either *active* or *stopped*. When the Adabas nucleus terminates normally, any active or stopped statistics are printed on the DDPRINT file. APFLOOK statistics can also be printed using AFPCMD.

Starting an APFLOOK Session

Selecting option code 1 from the APFLOOK Services menu or entering 6.1 on any command line displays the APFLOOK Start Sampling screen:

```

16:36:23 ***** A D A B A S FASTPATH SERVICES 8.2.2                2006-05-19
          - Afplook - Start Sampling for DB 198 -                    F16100MA

Maximum Files                               64                (See Note 2)
Max.Commands/Descriptors per File          32
Maximum Concurrent Users                   100
Max.CIDs per User                          10

Max.Commands to Sample                      0                (0=No Limit)
Restrict to Job Name                        _____

Restrict to Files _____

Notes: 1. To sample ALL files - leave the above file table empty
       2. Max. files will be set automatically if file numbers
          are selected

Press PF5 to Confirm Start

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

Start APFLOOK Processing

The parameters on this screen are described briefly in the following table. Initially, default values for the parameters are shown. You can modify certain parameter values from this screen.

Parameter	Description
Maximum Files	The maximum number of files to be sampled. If one or more files are specified in the parameter Restrict to Files, this parameter will be set automatically to the number of restricted files.
Maximum Commands/Descriptors per File	The maximum number of command/descriptor pairs which can be included in the sampling session. This parameter controls the table size for each file. When all entries are used, the last table entry is used as a general accumulator.

Parameter	Description
Maximum Concurrent Users	The maximum number of concurrent users for this sampling session. When all user table entries are full, new users reuse the least active/oldest user in the table. This may lead to inaccurate reports if the table size is too small. The number of reused user areas is shown in the sample summary section.
Maximum CIDs per User	The maximum number of Command IDs per user for this sampling session. If this maximum is reached, additional commands will be ignored.
Maximum Commands to Sample	The maximum number of commands to be sampled. A value of 0 indicates no restriction.
Restrict to Job Name	The sampling session is to be restricted to commands for the specified job, or for a series of jobs that match the job name as defined using an asterisk (*) as a wild card character.
Restrict to Files	The sampling session is to be restricted to the files specified.

APFLOOK File Summary

Selecting option code 2 from the APFLOOK Services menu or entering 6.2 on any command line displays the APFLOOK File Summary screen.

This screen lists the active files for the selected database, the number of commands for each file, and the potential optimization.

```

12:31:26      ***** A D A B A S  FASTPATH SERVICES 8.2.2 *****      2006-05-19
                Afplook - Files Summary for DB 198                      F16200MA

                Started: May 19,2006 at: 12:30 by: UKDEV1

C   Fnr      Total      Direct Access      RCs      Sequential
-   11
x   18      3071741 (91%)      480751 (16%)      440      2590453 (84%)
-   21      166      37 (22%)      2 ( 1%)      115 (69%)
-   24
-   27      524      200 (38%)      110 (21%)      145 (28%)
-   28      1126      631 (56%)      117 (10%)      192 (17%)
-   30      121927 ( 4%)      30121 (25%)      17411 (14%)      63882 (52%)
-   31      68034 ( 2%)      21588 (32%)      16214 (24%)      25353 (37%)
-   32      12596      5936 (47%)      3900 (31%)      1705 (14%)
-   33      3649      3649
-   34      833      188 (23%)      65 ( 8%)      486 (58%)
-   37      2      1 (50%)      1 (50%)
Total      3382726 (100%)

Mark to Display File Details

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

APFLOOK File Summary

The following fields are provided:

Field	Description
C	This field can be marked to display further details for a file.
Fnr	Adabas file number.
Total	The number of commands for this file, and the percentage of file commands to database commands.
Direct Access	The number of direct access commands for this file, and the percentage of potential optimization for direct access commands.
RC	<p>The number of Release Command ID commands for this file, and the percentage of potential optimization for RC commands.</p> <p>The Adabas RC command releases one or more Command IDs currently assigned to a user. See the <i>Adabas Command Reference</i> documentation for more information. When a direct access command is optimized, it is often possible to optimize its matching RC command. The RCs column indicates the potential cases. RC commands cannot be optimized for sequential (that is, read-ahead) access.</p>

Field	Description
Sequential	The number of sequential commands for this file, and the percentage of potential optimization for sequential commands.
Total (bottom of screen)	The total number of commands for all files.

In the above example, file 18 would be a prime candidate for optimization in that 91% of the database commands are for file 18. In addition, the sampling indicates that 16% of direct access commands and 84% of sequential access for file 18 can be optimized using Adabas Fastpath.

Further details for a file can be obtained by

- marking column C for the file, or
- entering 6.2.1 on any command line to display a previously accessed file.

The File Details screen will appear. This screen provides information for each command/descriptor pair which could be defined for Adabas Fastpath optimization.

```

12:32:21  ***** A D A B A S  FASTPATH SERVICES 8.2.2 *****                2006-05-19
          - Afplook - Details for DB 198  File 19 -                            F16210MA

          Started: May 19,2006 at: 12:30 by: UKDEV1

CC DE Direct Acc          RCs  Sequential  Sequences          Non-Qualifying
L3 KK      480777         415    2590506    480362          Updates 34
L1 --              2                                Inserts 1620
L9 KK              15            15          Deletes 1670
S1 KK              10            10

                                          Prefetch 0
                                          Excluded 2255
                                          Spare 0
                                          No CID 0
                                          Max.CIDs 0
                                          Bad Rsp. 0
                                          Max.Rec.Buff.Len
Total      480804          440    2590506
Total Commands for File          3071847          Direct Acc 1120
                                          Sequential 1120

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

APFLOOK File Details Display

For information on how to interpret the above information, refer to the section APFLOOK.

AFPLOOK Summary Display

Selecting option code 3 from the AFPLOOK Services menu, or pressing PF10 from the Files Summary screen displays the AFPLOOK Summary screen.

This screen summarizes the potential for Adabas Fastpath optimization. It is important to note that whereas the estimates provided are useful in determining where optimization potential may exist, it cannot be guaranteed that this potential will always be attained to the extent estimated.

```

12:33:10  ***** A D A B A S  FASTPATH SERVICES 8.2.2  *****                2006-05-19
          - Afplook - Summary for DB 198 -                                F16300MA

          Afplook Started May 19,2006 at 12:30 by UKDEV1

----- Potential Optimization Summary -----

          Sampled Commands                Potential Optimization

Sampled File Commands    3383333 (75%)  <=== Sequential:          2722211 (80%)
                               Direct Access:      579729 (17%)
                               RCs:                    58540 ( 2%)

Excluded Commands       1130492 (25%)

Totals                   4513825 (100%)                3360480 (74%)

-----

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

AFPLOOK Summary Display

Refer to the section AFPLOOK for descriptions of the statistics shown.

Pressing PF11 on the previous screen displays the Summary Command Analysis screen:

```

12:33:41 ***** A D A B A S FASTPATH SERVICES 8.2.2 *****                2006-05-19
          - Afplook - Summary for DB 198 -                                     F16300MB

          Afplook Started May 19,2006 at 12:30 by UKDEV1

----- Command Analysis -----
Rejected Commands:
  Max.Users Exceeded:
  Max.CIDs Exceeded:
  Max.Files Exceeded:
Excluded Commands:
  Bad Commands:                365
  Non-File Commands:           1000944
  Non-File RCs:                31309
  Excluded File Commands:      44988
  Update Commands:             52886
  Already Prefetched:          1130492 (25%)
Sampled File Commands:         3383333 (75%)
All Commands Seen:             4513825 (100%)

----- Parameters and High Water Marks -----
Max.Files: 64   Files Needed: 21   Max. DE: 32   Overflows:
Max.Users: 100 Peak Users: 9       Max.CID: 10   Peak CIDs: 5

Reused User Areas:

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

AFPLOOK Command Summary Display

This screen summarizes command processing and also displays the parameters that were used for the sampling session.

Refer to the section AFPLOOK for descriptions of the statistics shown.

11 Adabas System Coordinator online administration

- Current activity display 100

This section describes the administrative functions relating to Adabas Fastpath that are found with Adabas System Coordinator.

Current activity display

Use the System Coordinator current activity display function to see the activities of Adabas jobs and the client sessions within them, including specific detail for Fastpath.

Display job statistics

► To display Adabas Fastpath statistics within System Coordinator:

- Use PF11 to select Adabas Fastpath and the following will appear:

```

11:17:07      ***** A D A B A S   SYSTEM COORDINATOR 8.2.1 *****      2011-03-17
                - Adabas Fastpath Session Statistics -                      U1STS0M2

Node ID: 17004 Session ID: TSU42818 Hex: E3E2E4F4F2F8F1F8 Job Name: UKRPE

----- Optimization Summary -----
Access Type           Attempts (80%)    <-----Successes (90%)

Read-ahead:           7,769 (23%)           5,440 (70%)
Direct:                13,871 (41%)          13,668 (98%)
RCs:                   5,372 (16%)           5,372 (16%)
Others:                6,401 (19%)

Total:                 33,413 (100%)        24,480 (73%)
-----
                                Over-reads:           884 (16%)

Command ==>

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
                                Exit Refr           Excl           Tasks Prods ←
    
```


Display session statistics

► To display Adabas Fastpath session statistics within System Coordinator:

- Use PF11 to select Adabas Fastpath and the following will appear:

```

11:17:07      ***** A D A B A S   SYSTEM COORDINATOR 8.2.1 *****      2011-03-17
                - Adabas Fastpath Session Statistics -                      U1STS0M2

Node ID: 17004 Session ID: TSU42818 Hex: E3E2E4F4F2F8F1F8 Job Name: UKRPE

----- Optimization Summary -----
Access  Type                Attempts (80%)    <-----Successes (90%)

Read-ahead:                7,769 (23%)          5,440 (70%)
Direct:                    13,871 (41%)         13,668 (98%)
RCs:                       5,372 (16%)          5,372 (16%)
Others:                    6,401 (19%)

Total:                     33,413 (100%)       24,480 (73%)
-----
                                Over-reads:                884 (16%)

Command ==>

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
                                Exit  Refr          Excl          Tasks Prods ←
    
```

The following information is provided:

Field	Description
Access	Attempts: the percentage of optimization attempts (optimization attempts divided by total number of commands).
Type	Successes: the percentage of successful optimization attempts (successful optimization attempts divided by number of optimization attempts).
Read-Ahead	Attempts: the number of read-ahead optimization attempts, and the attempt percentage (read-ahead optimization attempts divided by total number of commands). Successes: the number of successful read-ahead optimization attempts, and the percentage of successful attempts (successful read-ahead optimization attempts divided by read-ahead optimization attempts).

Field	Description
Direct	Attempts: the number of direct access optimization attempts, and the attempt percentage (direct access optimization attempts divided by total number of commands). Successes: the number of successful direct access optimization attempts, and the percentage of successful attempts (successful direct access optimization attempts divided by direct access optimization attempts).
RCs	Attempts is always equal to successes. This is the number of optimized RCs that immediately followed a direct access command (without any intervening "next" commands).
Others	Attempts: the number of commands which were excluded from optimization, and percentage (number of these excluded commands divided by total number of commands). Note: For more information on excluded attempts, use PF6.
Total	Attempts: the total number of commands encountered by Adabas Fastpath. Successes: the total number of successful optimization attempts, and the percentage of successful attempts (successful optimization attempts divided by total number of commands).

Display session exclusions

▶ **To display session exclusions:**

- Press PF6 from the Adabas Fastpath session statistics screen and the following will appear:

```

11:17:58      ***** A D A B A S   SYSTEM COORDINATOR 8.2.1 *****      2011-03-17
                - Adabas Fastpath Session Statistics -                    U1STS0M5

Node ID: 17004 Session ID: TSU42818 Hex: E3E2E4F4F2F8F1F8 Job Name: UKRPE

Statistics for commands that have optimization potential but were
unable to be optimized:

                Unsuitable command type:                                71
                Disqualified:                                           3,972
                Optimization was disabled:                               0
                Multi-fetch was already set:                             0
                Command details exceed Set-id limit:                     0
                Record Buffer exceeds the limit:                          0

Command ==>

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
                Exit  Refr                                Gen          Tasks Prods Menu
    
```

This screen displays the following information:

Information	Description
Excluded - Reasons	The total number of commands excluded from optimization for the listed reasons. For more information, see Excluded Commands.

12 Activity Displays

- Activity display for jobs 106
- Activity display for client sessions 108

This section provides an overview of the activity display functionality.

Activity display for jobs

Activity displays are provided through System Coordinator administration by selecting *Current activity displays* at the main menu then *Adabas client job information*. At that point you will see a summary list of all the jobs that are known. Use “d” to select further detail for the job you are interested in. This will show further detail from Coordinator; then use PF11 to toggle until the Fastpath detail for the job is encountered as follows:

```

11:58:42      ***** A D A B A S      SYSTEM COORDINATOR 8.2.2 *****      2012-03-08
              - Fastpath Job Details -
C12110M1
Run-mode: Pulsing (node 2650)           Perspective: Daemon (node 2650)
Job Name: DAEFCI18

----- Optimization Summary -----
Access  Type                Attempts (21%)  <-----Successes (69%)

Read-ahead:                1,025 (21%)           708 (69%)
Direct:                    (0%)                 (0%)
RCs:                      (0%)                 (0%)
Others:                    3,807 (78%)
Total:                     4,832 (100%)        708 (14%)
-----

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

The following information is provided:

Field	Description
Access	Attempts: the percentage of optimization attempts (opimization attempts divided by total number of commands).
Type	Successes: the percentage of successful optimization attempts (successful optimization attempts divided by number of optimization attempts).
Read-Ahead	Attempts: the number of read-ahead optimization attempts, and the attempt percentage (read-ahead optimization attempts divided by total number of commands). Successes: the number of successful read-ahead optimization attempts, and the percentage of successful

Field	Description
	attempts (successful read-ahead optimization attempts divided by read-ahead optimization attempts).
Direct	Attempts: the number of direct access optimization attempts, and the attempt percentage (direct access optimization attempts divided by total number of commands). Successes: the number of successful direct access optimization attempts, and the percentage of successful attempts (successful direct access optimization attempts divided by direct access optimization attempts).
RCs	Attempts is always equal to successes. This is the number of optimized RCs that immediately followed a direct access command (without any intervening "next" commands).
Others	Attempts: the number of commands which were excluded from optimization, and percentage (number of these excluded commands divided by total number of commands). Note: For more information on excluded attempts, use PF6.
Total	Attempts: the total number of commands encountered by Adabas Fastpath. Successes: the total number of successful optimization attempts, and the percentage of successful attempts (successful optimization attempts divided by total number of commands).

Display job exclusions

▶ To display job exclusions:

- Press PF6 from the Adabas Fastpath job statistics screen and the following will appear:

```

12:26:10      ***** A D A B A S   SYSTEM COORDINATOR 8.2.2 *****   2012-03-12
                - Adabas Fastpath Job Statistics -                               ↵
C12110M5
Node ID: 2650  Session ID: CICSTC26 Hex: C3C9C3E2E3C3F2F6 Job Name: DAEFCI18
Terminal name: TC26          Network name: DAEETC26      Login id: UKRPE

Statistics for commands that have optimization potential but were
unable to be optimized:

C      Description                                     Count
_      Unsuitable command type:                       23
_      Disqualified:                                   318
_      Optimization was disabled:                      0
_      Multi-fetch was already set:                    0
_      Command details exceed Set-id limit:            0
_      Record Buffer exceeds the limit:                 0

Mark (above) to display further information about any exclusion.           ↵

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

This screen displays the following information:

Information	Description
Excluded - Reasons	The total number of commands excluded from optimization for the listed reasons. For more information, see Excluded Commands.

Select an exclusion to display further information about that exclusion reason.

Activity display for client sessions

Activity displays are provided through System Coordinator administration by selecting *Current activity displays* at the main menu then *Adabas client job information*. At that point you will see a summary list of all the jobs that are known. Use any undefined character to expand to see a list of all the sessions for the job. Again use any character to select a particular session. The detail for a session will show a list of one or more Adabas client connections (multiple will be shown where ADAMODE demands multiple connections). Again use any unassigned character to select one of these connections for further display. Finally use PF11 to toggle until the Fastpath detail for the connection is encountered as follows:


```

16:27:29      ***** A D A B A S   SYSTEM COORDINATOR 8.2.2 *****      2012-03-08
              - Adabas Fastpath Session Statistics -                U1STS0M2
Node ID: LOCAL Session ID: TSU44781 Hex: E3E2E4F4F4F7F8F1 Job Name: UKRPE
Terminal name: DAEETCH2      Network name: TSO                      Login id: UKRPE

```

```

----- Optimization Summary -----
Access  Type                Attempts (21%)    <-----Successes (69%)
Read-ahead:                1,025 (21%)                708 (69%)
Direct:                    (0%)                      (0%)
RCs:                      (0%)                      (0%)
Others:                    3,807 (78%)
Total:                     4,832 (100%)              708 (14%)
-----

```

Command ==>

```

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
          Exit  Refr          Excl          Tasks Prods Menu

```

The following information is provided:

Field	Description
Access	Attempts: the percentage of optimization attempts (optimization attempts divided by total number of commands).
Type	Successes: the percentage of successful optimization attempts (successful optimization attempts divided by number of optimization attempts).
Read-Ahead	Attempts: the number of read-ahead optimization attempts, and the attempt percentage (read-ahead optimization attempts divided by total number of commands). Successes: the number of successful read-ahead optimization attempts, and the percentage of successful attempts (successful read-ahead optimization attempts divided by read-ahead optimization attempts).
Direct	Attempts: the number of direct access optimization attempts, and the attempt percentage (direct access optimization attempts divided by total number of commands). Successes: the number of successful direct access optimization attempts, and the percentage of successful attempts (successful direct access optimization attempts divided by direct access optimization attempts).
RCs	Attempts is always equal to successes. This is the number of optimized RCs that immediately followed a direct access command (without any intervening "next" commands).

Field	Description
Others	Attempts: the number of commands which were excluded from optimization, and percentage (number of these excluded commands divided by total number of commands). Note: For more information on excluded attempts, use PF6.
Total	Attempts: the total number of commands encountered by Adabas Fastpath. Successes: the total number of successful optimization attempts, and the percentage of successful attempts (successful optimization attempts divided by total number of commands).

Display session exclusions

► To display session exclusions:

- Press PF6 from the Adabas Fastpath session statistics screen and the following will appear:

```

12:26:10      ***** A D A B A S   SYSTEM COORDINATOR 8.2.2 *****      2012-03-12
              - Adabas Fastpath Session Statistics -                U1STS0M5
Node ID: 2650  Session ID: CICSTC26 Hex: C3C9C3E2E3C3F2F6 Job Name: DAEFCI18
Terminal name: TC26          Network name: DAEETC26      Login id: UKRPE

Statistics for commands that have optimization potential but were
unable to be optimized:

C      Description                                     Count
-      Unsuitable command type:                       23
-      Disqualified:                                   318
-      Optimization was disabled:                      0
-      Multi-fetch was already set:                    0
-      Command details exceed Set-id limit:            0
-      Record Buffer exceeds the limit:                 0

Mark (above) to display further information about any exclusion.

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

This screen displays the following information:

Information	Description
Excluded - Reasons	The total number of commands excluded from optimization for the listed reasons. For more information, see Excluded Commands.

Select an exclusion to display further information about that exclusion reason.

