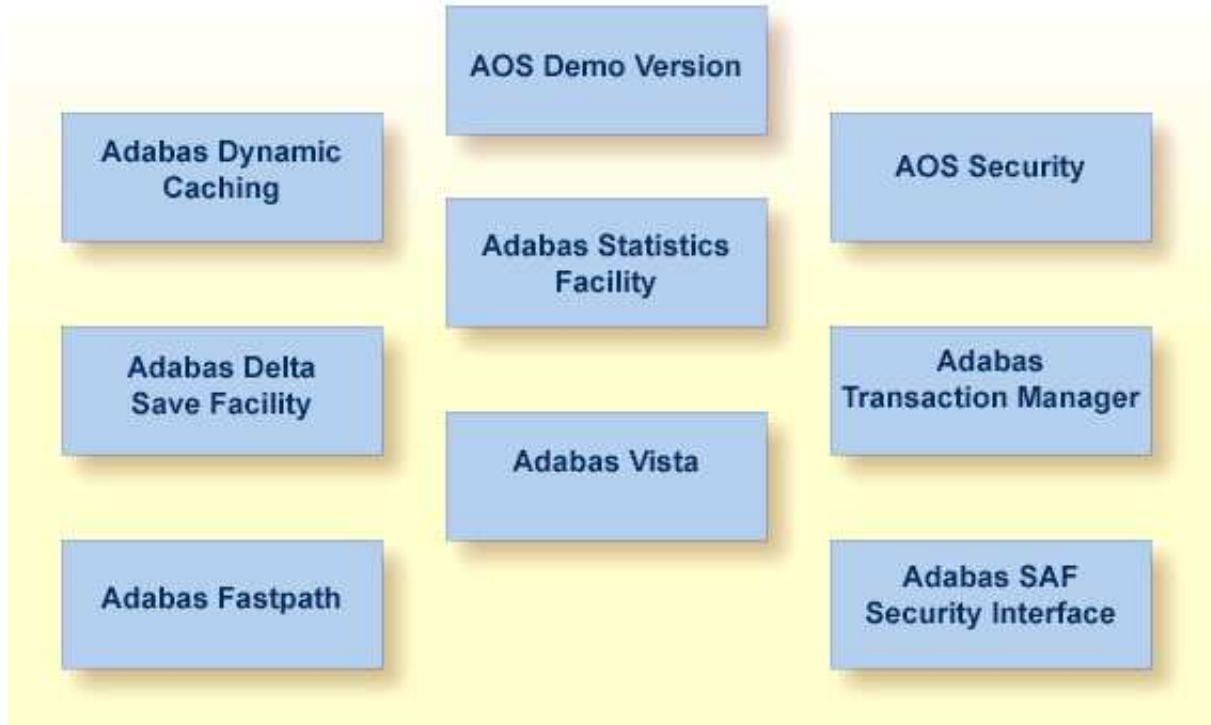


Adabas Online System Demo Version

A demo version of Adabas Online System (AOS) and access to the online services for selected other Adabas products and facilities is included with Adabas as shown in the following diagram:



AOS Demo Version

This part of the DBA tasks documentation describes the operation and use of the AOS demo version. The use of the online services for the other Adabas products and facilities is described in the manuals for those products and facilities. The demo services available for Adabas Fastpath (AFPLOOK) and Adabas Vista (AVILOOK) are described in *AFPLOOK* and *AVILOOK*. AOS Security is described in the Adabas Security documentation.

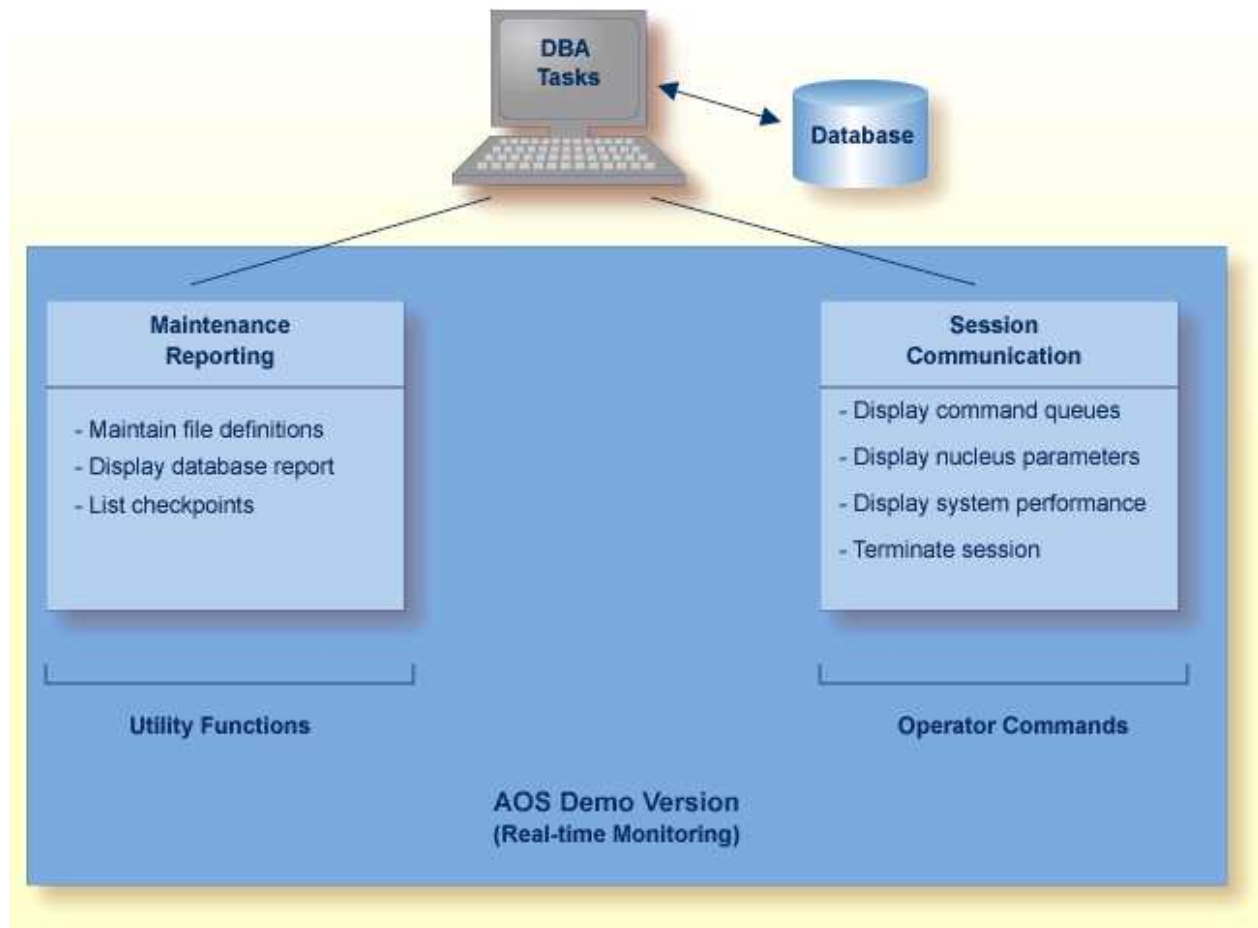
This information is organized under the following headings:

- Overview
- Main Menu Functions
- Session Monitoring
- List Checkpoints
- File Maintenance
- Database Maintenance

- System Operator Command Functions
- Database Report

Overview

The AOS demo version includes the following functions that are comparable to Adabas operator commands and utilities and are used for Adabas database analysis and control:



Overview of the AOS Demo Version

See the Adabas Installation documentation for information about installing the demo version of AOS.

The AOS add-on product includes services that correspond to additional utility functions and operator commands. Read the Adabas Online System documentation for information.

The DBA can use the AOS demo version to monitor aspects of an Adabas database while an Adabas session is active. Using menu options, the DBA can view resource and hold queue status; display space allocation; display file and database parameters; create new FDTs; and stop a current Adabas session.

For analyzing performance and monitoring database operation, the AOS demo version displays the system from the viewpoint of either a user or a particular system resource. For example, you can:

- check hold queue status;
- view nucleus parameters;
- monitor command and file usage and system performance information;
- list file layout and extent status; and
- list file distribution of the database by VOLSER.

For controlling the overall Adabas session, the AOS demo version can be used to

- create new FDTs; and
- terminate an Adabas nucleus session (ADAEND).

Main Menu Functions

To enter the AOS demo version, log on to the Natural application SYSAOS and enter MENU at the NEXT prompt, if one appears.

Note:

If the full version AOS is installed on your system, enter MENU instead. See the Adabas Online System documentation for more information.

```

15:08:13          ***** A D A B A S  BASIC  SERVICES *****          2009-08-11
                                -  Main Menu  -                                PMAIN02

      Code  Basic Services          Code  Other Services
      ----  -
      A     Session monitoring      1     Adabas Cache Facility
      C     Checkpoint maintenance  2     Delta Save Facility
      F     File maintenance        *     Trigger Maintenance
      M     Database maintenance    4     AOS Security
      O     Session opercoms        5     Transaction Manager
      R     Database report          6     Adabas Statistics
      *     Space calculation        7     Vista
      ?     Help                    8     Fastpath
      .     Exit                    9     SAF Security
      ----  -

Code ..... _
Database ... 1955      (WIS1955)

Command ==>
PF1----- PF2----- PF3----- PF4----- PF6----- PF7----- PF8----- PF12-----
Help              Exit
  
```

The Main Menu displays the functions available with Adabas Online System. AOS functions that are not *not* available with the demo version are marked with an asterisk (*) on the screen.

From the Main Menu, you can access available "Basic Services" functions or one of the "Other Services" installed on your system. Other services installed at your site are highlighted.

The Main Menu indicates the main DBA tasks in the demo version:

Option	Function
A	<i>Session monitoring</i> allows you to display nucleus parameters, session and thread status information, ISNs in the hold queue, and maintenance levels for nucleus modules
C	<i>Checkpoint maintenance</i> allows you to list checkpoint information
F	<i>File maintenance</i> allows you to define a new FDT for a new file
M	<i>Database maintenance</i> is not active for the demo version
O	<i>Session opercoms</i> allows you to add or delete PIN modules used by the extended error recovery facilities; display currently loaded PIN routines and activate or deactivate them, display locked files, and terminate a session normally (ADAEND)
R	<i>Database report</i> allows you to view general database layout information, tables of database files, and detailed information for any file

Subsequent sections in this chapter describe the major functions of the AOS demo version and menu/screen structures in the order that they appear on the Main Menu.

This section covers the following topics:

- Specifying the AOS Demo Version Database
- Using Program Function (PF) Keys
- Selecting a Menu Option
- Getting Help
- AOS Demo Version Messages

Specifying the AOS Demo Version Database

The database on which the AOS demo version is installed becomes the default database for demo version functions. However, you can specify the database of any active Adabas nucleus session. Subsequent AOS demo version functions refer to that database until you specify another database or exit the AOS demo version.

Using Program Function (PF) Keys

Available PF keys and their functions are listed at the bottom of each screen. The following program function (PF) keys appear on all screens within the AOS demo version; other navigation keys appear on some screens:

PF1	Help
PF3	Exit to previous screen
PF12	Return to the Main Menu

Selecting a Menu Option

To select a function or option, enter the option code in the Code field.

Selecting a Main Menu function displays a menu of choices for that function.

Getting Help

From any AOS demo version menu, you can use PF1 to display a brief comment about the current menu. See *Using Program Function (PF) Keys* .

AOS Demo Version Messages

The AOS demo version issues a message confirming each completed function. If an error occurs, a message appears containing a reference number and describing the error.

Before analyzing an error, try reviewing the help information (PF1) for the last step you performed to see if any requirements were overlooked; then retry the operation.

Response code 22 (ADARSP022) is returned if the Adabas session is terminated and restarted while the AOS demo version is active. In this case, the application should be stopped and restarted.

Session Monitoring

Adabas session monitoring functions display major Adabas resources. These functions are most useful when analyzing system performance or seeking the cause of performance problems.

```

19:17:59          ***** A D A B A S  BASIC  SERVICES  *****          2009-08-18
                   -  Session Monitoring  -                               PAC0002

Code  Service                                           Code  Service
----  -
*    Display cluster members                          *    Refresh nucleus statistics
*    Maintain user profiles                            *    Current resource statistics
D    Display parameters                                *    Maintain TCP/IP URL
I    Display installed products                       U    Display resource utilization
*    Display event log buffer                          *    Replicator Management
*    Modify parameters                                 Z    Display maintenance levels
Q    Display queues                                    .    Exit
?    Help
----  -

Code ..... _
Database ID .. 1955      (WIS1955)

Command ==>
PF1----- PF2----- PF3----- PF4----- PF6----- PF7----- PF8----- PF12-----
Help                Exit                Menu
    
```

You can use the Session Monitoring environment to monitor the Adabas nuclei in a multiprocessing (Parallel Services or Cluster Services) environment. When the DBID of a Parallel or Cluster Services database is entered on the Session Monitoring menu, subsequent screens include a field to specify the ID of the nucleus in the cluster that you want to monitor.

Each of the functions on the Session Monitoring menu is discussed in the following sections:

Option	Function
D	Display Adabas nucleus (ADARUN) parameters
I	Display a list of installed products
Q	Display the contents of the hold queue
U	Display session status and thread usage
Z	Display Adabas nucleus modules: maintenance levels and ZAPs applied

This section covers the following topics:

- Display ADARUN Parameters
- Display Installed Products
- Display Hold Queue
- Display System Status and Thread Usage
- Display Maintenance Levels

Display ADARUN Parameters

You can view Adabas nucleus (ADARUN) parameters.

To view the parameters, select option D from the Session Monitoring menu.

Multiple screens are used for displaying parameters:

```

17:05:12          ***** A D A B A S BASIC SERVICES *****          2009-08-11
DBID 1955          - Display Parameters -                               PACPD12

----- Pools -----
Sort Area          (LS).. 19968
Int. User Buffer   (LU).. 400000
Buffer Pool       (LBP).. 104192
Format Pool       (LFP).. 150000
ISN List Table    (LI).. 360000
Seq. Cmd. Table   (LQ).. 20000
Work Pool         (LWP).. 1500000
Attached Buffer    (NAB).. 100
Security Pool     (LCP).. 10000
UQ-DE Pool       (LDEUQP).. 50000
Err. Recovery     (MSGBUF).. 36

----- Queues -----
Command Queue     (NC) .. 20
Hold Queue        (NH) .. 400
User Queue        (NU) .. 200

----- Time Windows -----
Transaction Time  (TT) .. 4858
Max Transaction Time (MXTT) .. 3600
Nonactivity ACC-User (TNAA) .. 4858
Nonactivity ET-User (TNAE) .. 4858
Nonactivity EXU-User (TNAX) .. 4858
Max Nonactivity Time(MXTNA) .. 3600
Time Limit Sx-Cmds (TLSCMD) .. 300
Max Time for Sx-Cmds(MXTSX) .. 3600
Command Time      (CT) .. 3858
SYNS60 Interval  (INTNAS) .. 3600

Page 1 of 5
PF1----- PF2----- PF3----- PF4----- PF6----- PF7----- PF8----- PF12-----
Help          Exit          +          Menu
    
```

```

17:05:12          ***** A D A B A S BASIC SERVICES *****          2009-08-11
DBID 1955          - Display Parameters -                               PACPD12

----- Miscellaneous -----
Read only session(READONLY) .. NO
UTI only session  (UTIONLY) .. NO
OPEN required     (OPENRQ) .. NO
Ignore DIB Entry  (IGNDIB) .. NO
Local nucleus     (LOCAL) .. NO
Number of Threads (NT) .. 5
Non DE Search     (NONDES) .. YES
Log AOS/DBS Update (AOSLOG) .. NO
Batch Support     (BATCH) .. NO
Data Protection Area (LP) .. 1000
Ignore Work Part 4 (IGNDTP) .. NO
WORK-Part-4 Area  (LDTP) .. 0
WORK-Part-2 Area  (LWKP2) .. 106
SVC               (SVC) .. 249

----- User Specific Limits -----
Hold Queue Limit (NISNHQ) .. 100
CIDs per User    (NQCID) .. 40
ISN per TBI Element(NSISN) .. 100

----- Buffer Pool -----
Bufferflush Dur. (TFLUSH) .. 1
Parallel LFIOP I/O (FMXIO) .. 1
Async. by Vol-Ser (ASYTVS) .. YES

Page 2 of 5
PF1----- PF2----- PF3----- PF4----- PF6----- PF7----- PF8----- PF12-----
Help          Exit          -          +          Menu
    
```

```

17:05:12          ***** A D A B A S BASIC SERVICES *****          2009-08-11
DBID 1955          - Display Parameters -          PACPD12

----- Command Logging -----
Command Logging .. YES          Log VOLSER info (LOGVOLIO) .. NO
LOGCB ..... NO          Max buffer size/cmd (CLOGMAX) .. 16384
LOGFB ..... YES          Max buffer size/buf(CLOGBMAX) .. 4096
LOGRB ..... YES          Log ABDX (LOGABDX) .. 7073
LOGSB ..... NO          Log multifetch buffer (LOGMB) .. NO
LOGVB ..... NO          Log users buffer (LOGUB) .. NO
LOGIB ..... NO          Command log layout(CLOGLAYOUT).. 5
LOGIO ..... NO
LOGUX ..... NO
LOGSIZE ..... 5064
DUAL CLOG Size ... 675
DUAL CLOG Dev. ... 3390
NCLOG ..... 0

----- Protection Logging -----
PLOG required (PLOGRQ) .. YES
DUAL PLOG Size (DUALPLS) .. 240
DUAL PLOG Device (DUALPLD) .. 3390
NPLOG ..... 0

Page 3 of 5
PF1----- PF2----- PF3----- PF4----- PF6----- PF7----- PF8----- PF12-----
Help          Exit          -          +          Menu
    
```

```

17:05:12          ***** A D A B A S BASIC SERVICES *****          2009-08-11
DBID 1955          - Display Parameters -          PACPD12

----- Large Pools -----
Flush I/O Pool (LFIOP) .. 80000

----- Additional Miscellaneous -----
LARGEPAGE ..... NO
V64BIT ..... NO
Number plog buffers ..... 1
Number workl buffers ..... 1
Event log buffer size .... 1024
SRLOG ..... Upd

----- Other Services -----
Triggers / Procedures (SPT) .. NO
Delta Save Facility (DSF) .. YES
Cache Facility (CACHE) .. NO
Transaction Manager (ATM) .. NO
TCP/IP Support (TCPIP) .. NO
Ext. Error Recovery (SMGT) .. YES
2 Phase Commit Support(DTP) .. NO

Review:
Support (REVIEW) .. NO
Filter ..... YES
Max bufsize cmd .... 16384
Max bufsize buf .... 5120

Page 4 of 5
PF1----- PF2----- PF3----- PF4----- PF6----- PF7----- PF8----- PF12-----
Help          Exit          -          +          Menu
    
```



```

17:05:12          ***** A D A B A S  BASIC  SERVICES *****          2009-08-11
DBID 1955          -  Display Parameters  -                               PACPD12

---- Replication Parameters ----
Replication ..... YES
RPPWARNPercent ..... 0
RPPWARNINCrement ..... 10
RPPWARNINterval ..... 60
RPPWARNMessagelimit ... 5
RPPCONNECTCount ..... 0
RPPCONNECTInterval .... 0
RPLSORT ..... YES

                                                                    Page 5 of 5
PF1----- PF2----- PF3----- PF4----- PF6----- PF7----- PF8----- PF12-----
Help                Exit                -                Menu
    
```

Display Installed Products

Choose option **I** on the **Session Monitoring** menu and press ENTER to display a list of installed products.

```

10:32:36          ***** A D A B A S  BASIC  SERVICES *****          2009-08-12
DBid 1955          -  Display Installed Products  -                       PACII02

-----
Cache Facility ..... NO          Extended Error Recovery ..... YES
Delta Save Facility ..... YES      Recovery Aid ..... YES
Cluster Services ..... NO          Stored Procedures & Triggers .. NO
Parallel Services ..... NO          Two Phase Commit ..... NO
Fastpath ..... NO                  TCPIP support ..... NO
Vista ..... NO                     Event Replicator ..... YES
Transaction Manager ..... NO
SAF Security Interface ... NO
Review ..... NO
Adabas Online System ..... YES

Command ==>
PF1----- PF2----- PF3----- PF4----- PF6----- PF7----- PF8----- PF12-----
Help                Exit                -                Menu
    
```

This screen displays what is installed on the current selected Adabas

Display Hold Queue

Selecting *Queue displays* (option Q) from the Session Monitoring menu displays the following menu:

```

19:23:16          ***** A D A B A S  BASIC  SERVICES *****          2009-08-18
                   -  Queue Displays  -                               PACQ002

                Code      Service
                ----      -
                *          Display User Queue Elements
                *          Display Command Queue
                H          Display Hold Queue
                ?          Help
                .          Exit
                ----      -

Code ..... _
Max No. Elements ... 100
Last Activity ..... 0          (elapsed time in seconds)
Selection Criteria
  ET-ID (User-ID) .. _____ User Type ... ____
  Job Name ..... _____
  Terminal ID ..... _____
Database ID ..... 1955          (WIS1955)          0

Command ==>
PF1----- PF2----- PF3----- PF4----- PF6----- PF7----- PF8----- PF12-----
Help          Exit       Clear UID          Menu
    
```

Option H displays a list of the ISNs currently in hold status.

If the queue is currently empty, an appropriate message appears.

Display System Status and Thread Usage

Selecting *Resource utilization* (option U) from the Session Monitoring menu invokes the Resource Utilization menu:

```

19:24:53          ***** A D A B A S  BASIC  SERVICES  *****          2009-08-18
                   - Resource Utilization -                               PACU002

Code  Service                Code  Service
-----
*    Command usage           S    System status
*    File usage              T    Thread usage
*    High water marks (pools/queues) *    WORK status
*    Workpool (LWP) usage    *    Cluster usage
*    Nucleus File Status    *    Display PPT table
*    PLOG status
?    Help
.    Exit
-----

Code ..... _
File Number .. 0
Database ID .. 1955 (WIS1955)

Command ==>
PF1----- PF2----- PF3----- PF4----- PF6----- PF7----- PF8----- PF12-----
Help                Exit                Menu
    
```

Each option allows you to refresh (PF4) the displayed values, a convenience for long-term monitoring of Adabas system functions.

System Status

System status (option S) displays I/O counts for the ASSO, DATA, WORK, and PLOG data sets; remote and local call distribution; and other current session status information.

```

16:44:13          ***** A D A B A S  BASIC  SERVICES  *****          1999-01-28
DBID 105          - System Status -                               PACUS02

                Physical
                Reads        Writes
-----
ASSO            132          29  Remote Logical ..... 0
DATA            3           9  Remote Physical ..... 0
WORK            4           29  Local Logical ..... 145
PLOG            0           0  Local Physical ..... 0
Logical Reads ..... 194  Logical Reads (binary) ..... 000000C2
Buffer Efficiency .... 1.4  No. of HQEs active ..... 0
                No. of UQEs in User Queue .. 2
Format Translations .. 0  No. of CQEs waiting in CQ .. 0
Format Overwrites .... 0
                Total intern. Autorestarts . 0
Throw Backs for ISN .. 0  No. of PLOG switches ..... 0
Throw Backs for Space. 0  No. of Bufferflushes ..... 8

PF1----- PF2----- PF3----- PF4----- PF6----- PF7----- PF8----- PF12-----
Help                Exit                Refresh                Menu
    
```

Thread Usage

Thread usage (option T) displays a table of all defined Adabas threads, the status of each, the command type currently in process in each active thread, and the number of commands processed by each thread in the current session.

```

11:47:18          ***** A D A B A S  BASIC  SERVICES  *****          1997-01-30
DBID 105          -  Thread Status  -          PACUT02

      Nr.  I Thread Status          I Command Type          I Nr.  CMDs  I
-----
      1  I Active                    I Simple Cmd.           I 18992  I
      2  I Not active                I                       I 109    I
      3  I Not active                I                       I 0      I
      4  I Not active                I                       I 0      I
      5  I Not active                I                       I 0      I
      I                                     I                       I      I
  
```

Display Maintenance Levels

Selecting *Display maintenance levels* (option Z) from the Session Monitoring menu displays information about the Adabas nucleus modules:

```

18:34:02          ***** A D A B A S  BASIC  SERVICES  *****          2009-08-13
DBID 1955          -  Display Maintenance Levels  -          PACZ002
NucID .. 1021

Select Module Name: _____

-----
ADARUN  RUNMVS  Date 2009-07-30, Version 8.2, SM 8, Base AO828008
          RUNIND  Date 2009-07-30, Version 8.2, SM 8, Base AI828000
ADANCX  Date 2009-07-23, Version 8.2, SM 8, Base AN828000
ADAXCF  Date 2007-06-15, Version 8.1, SM 8, Base AP818000
ADAXEC  Date 2008-02-20, Version 8.1, SM 8, Base AP818000
ADAXEL  Date 2009-05-25, Version 8.2, SM 8, Base AP828000
ADACLU  Date 2009-07-23, Version 8.2, SM 8, Base AN828000
ADAMXI  Date 2009-07-20, Version 8.2, SM 8, Base AN828000
ADAMIM  Date 2009-01-26, Version 8.2, SM 8, Base AN828000
ADARVU  Date 2009-07-12, Version 8.2, SM 0, Base AN820000
ADACLX  Date 2009-07-09, Version 8.2, SM 0, Base AN820000
ADARMT  Date 2009-06-03, Version 8.1, SM 0, Base AN810000

Command ==>
PF1----- PF2----- PF3----- PF4----- PF6----- PF7----- PF8----- PF12-----
Help          Exit          --          -          +          Menu
  
```

Maintenance levels for each module are displayed. Any ZAPs that are applied to the module are also listed.

The list of modules can be limited by entering a specific module name in the Select Module Name field at the top of the screen. A starting value may also be used. For example, specifying ADANC3 displays information for the ADANC3 module only. Specifying ADANC* lists all modules with names that begin with ADANC.

List Checkpoints

Selecting *Checkpoint maintenance* (option C) from the Main Menu invokes the Checkpoint Maintenance menu:

```

19:26:42          ***** A D A B A S  BASIC  SERVICES *****          2009-08-18
                  - Checkpoint Maintenance -                               PCP0002

                  Code      Service
                  ----      -
                  C        List checkpoints
                  *        Delete checkpoints
                  ?        Help
                  .        Exit
                  ----      -

Code ..... _
Date(YYYY-MM-DD) . 0000-00-00
Ext. CP-list ..... N
Checkpoint Name .. ALL
Database ID ..... 1955   (WIS1955)

Command ==>
PF1----- PF2----- PF3----- PF4----- PF6----- PF7----- PF8----- PF12-----
Help              Exit              Menu

```

Option C lists checkpoints currently in the checkpoint file.

The result can be either a basic or an extended list, depending on the setting of the External CP-list field, which can be used to override the CPEXLIST operating control parameter.

You can start the list of checkpoints on a particular day by entering the date in the Date field in exactly the format shown.

You can specify the database for which the checkpoint list is to be written.

You can restrict the list to a particular type of checkpoint by changing the ALL designation in the Checkpoint Type field to one of the following:

Type	Description
SYNC	nucleus initialization
SYNF	user open EXF
SYNP	utility, without nucleus
SYNS	ADARES
SYNV	volume ID change
SYNX	utility
SYN1	ADASAV DB begin
SYN2	ADASAV DB begin
SYN4	ADASAV file begin
SYN5	ADASAV file begin

For more information about checkpoint types, see ADAREP in the Adabas Utilities documentation .

The following screen displays a normal checkpoint list:

```

18:56:29          ***** A D A B A S BASIC SERVICES *****          2009-08-13
DBID 1955          - List Checkpoints -                               PCPC012

  CP   CP      Date      Time      PLOG      Block      Vol/Ser      User Job Name
  Name Type                                     Number      Number      Number      Type
-----
SYNP  30  2009-02-17  19:07:59                                     USAWISNO
SYNP  30  2009-02-17  19:07:59                                     USAWISNO
SYNP  30  2009-02-17  19:08:00                                     USAWISNO
SYNP  30  2009-02-17  19:08:01                                     USAWISNO
SYNP  30  2009-02-17  19:08:01                                     USAWISNO
SYNC  01  2009-02-17  19:08:02                                     USAWISNO
SYNS  5B  2009-02-17  19:08:02                                     EXU  ADAEND
SYNP  30  2009-02-17  19:17:04                2           1    DUAL      USAWISTA
SYNC  01  2009-02-17  19:27:58                2           2    DUAL      USAWISRP
SYNP  30  2009-02-17  19:42:40                2          365    DUAL      UTI  USAWISTA
SYNP  30  2009-02-17  19:42:40                2          366    DUAL      UTI  USAWISTA
SYNP  30  2009-02-17  19:42:40                2          367    DUAL      UTI  USAWISTA
SYNS  60  2009-02-17  21:17:58                2         21370    DUAL      ADABAS
SYNS  60  2009-02-18  16:41:30                2         21371    DUAL      ADABAS
SYNS  60  2009-02-19  09:25:33                2         21372    DUAL      ADABAS
PF1----- PF2----- PF3----- PF4----- PF6----- PF7 ----- PF8----- PF12-----
Help          Exit          Top          -          +          Menu
    
```

This screen illustrates an extended checkpoint list providing additional information about each checkpoint:

```

18:58:21          ***** A D A B A S BASIC SERVICES *****          2009-08-13
DBID 1955          - List Checkpoints -                               PCPC012

  CP   CP   Date      Time      PLOG   Block   Vol/Ser   User Job Name
  Name Type                                     Number   Number   Number   Type
-----
SYNP  30   2009-02-17 19:07:59                                     USAWISN0
      LOAD                                     FNR= 1
SYNP  30   2009-02-17 19:07:59                                     USAWISN0
      LOAD                                     FNR= 2
SYNP  30   2009-02-17 19:08:00                                     USAWISN0
      LOAD                                     FNR= 3
SYNP  30   2009-02-17 19:08:01                                     USAWISN0
      LOAD                                     FNR= 6
SYNP  30   2009-02-17 19:08:01                                     USAWISN0
      LOAD                                     FNR= 7
SYNC  01   2009-02-17 19:08:02                                     USAWISN0
      SESSION OPEN                               IGNDIB = N , FORCE = N
SYNS  5B   2009-02-17 19:08:02                                     EXU  ADAEND
      REFRESH STATS
SYNP  30   2009-02-17 19:17:04          2          1   DUAL          USAWISTA
PF1----- PF2----- PF3----- PF4----- PF6----- PF7 ----- PF8----- PF12-----
Help                Exit                Top          -          +          Menu

```

File Maintenance

Selecting option F from the Main Menu invokes the File Maintenance menu:

```

13:16:44          ***** A D A B A S BASIC SERVICES *****          2009-08-18
                                - File Maintenance -                               PFL0004

Code   Service
-----
C      Define/modify FDT
*      Release descriptor
*      Delete existing file
*      Define new file
*      Modify file parameters
*      Reorder file online
*      Refresh file to empty status
*      Allocate/deallocate file space
*      Maintain expanded files
?      Help
.      Exit
-----

Code ..... _
File No ..... 0      Descriptor Name .. ___
Database ID .. 1954  (WIS1954)
Command ==>

PF1----- PF2----- PF3----- PF4----- PF6----- PF7 ----- PF8----- PF12-----
Help                Exit                Menu

```

From the File Maintenance menu, option C displays the FDT/SDT Definition / Modification menu:

```

19:29:54          ***** A D A B A S  BASIC  SERVICES *****          2009-08-18
                   - FDT/SDT Definition / Modification -          PFLC004

                   Code      Service
                   ----      -
                   *      Add new field(s)
                   *      Change field parameters
                   D      Define new FDT
                   *      Delete field from FDT
                   *      Undelete field from FDT
                   *      Online invert
                   *      Define/add SDT
                   ?      Help
                   .      Exit
                   ----      -

Code ..... _
File No. ....
Field Name ... _
Database ID .. 1955      (WIS1955)

Command ==>
PF1----- PF2----- PF3----- PF4----- PF6----- PF7----- PF8----- PF12-----
Help      Def. File Exit                                  Menu
    
```

From the FDT/SDT Definition / Modification menu, option D displays the Define FDT screen, which can be used to define a new FDT for a new file:

```

21:09:04          ***** A D A B A S  BASIC  SERVICES *****          2009-08-21
DBID 1955          - Define FDT -          PFLCD12

File Number .... 55          New FDT ... Y

Enter Field Description(s) ::

I Lev1 I Name I Length I Format I Options          I Date/time stamp
I-----
I _ _ I _ _ I _ _ I _ _ I _ _ _ _ _ _ _ _ I _ _ _ _ _
I _ _ I _ _ I _ _ I _ _ I _ _ _ _ _ _ _ _ I _ _ _ _ _
I _ _ I _ _ I _ _ I _ _ I _ _ _ _ _ _ _ _ I _ _ _ _ _
I _ _ I _ _ I _ _ I _ _ I _ _ _ _ _ _ _ _ I _ _ _ _ _
I _ _ I _ _ I _ _ I _ _ I _ _ _ _ _ _ _ _ I _ _ _ _ _
I _ _ I _ _ I _ _ I _ _ I _ _ _ _ _ _ _ _ I _ _ _ _ _
I _ _ I _ _ I _ _ I _ _ I _ _ _ _ _ _ _ _ I _ _ _ _ _
I _ _ I _ _ I _ _ I _ _ I _ _ _ _ _ _ _ _ I _ _ _ _ _
I _ _ I _ _ I _ _ I _ _ I _ _ _ _ _ _ _ _ I _ _ _ _ _
I _ _ I _ _ I _ _ I _ _ I _ _ _ _ _ _ _ _ I _ _ _ _ _

PF1----- PF2----- PF3----- PF4----- PF6----- PF7----- PF8----- PF12-----
Help      Def SDT   Exit      Def File  Disp FDT          Menu
    
```



FDTs for existing files cannot be redefined with this option.

This function corresponds to the Adabas utility function ADACMP COMPRESS.

Database Maintenance

Selecting option M from the Main Menu invokes the Database Maintenance menu:

```

19:31:45          ***** A D A B A S BASIC SERVICES *****          2009-08-18
                  - Database Maintenance -                               PDM0002

                  Code      Service
                  ----      -
                  *        Add new dataset to ASSO/DATA
                  *        Increase/decrease ASSO/DATA
                  *        List/reset DIB block entries
                  *        Recover unused space
                  *        Uncouple two ADABAS files
                  ?        Help
                  .        Exit
                  ----      -

Code ..... _
File No. .... 0
Coupled File .. 0
Database ID ... 1955 (WIS1955)

Command ==>
PF1----- PF2----- PF3----- PF4----- PF6----- PF7----- PF8----- PF12-----
Help      Exit      Menu

```

None of the Database Maintenance functions are active for the demo version.

System Operator Command Functions

Selecting *Session opercoms* (option O) from the Main Menu displays the following menu:

```

19:36:22          ***** A D A B A S  BASIC  SERVICES *****          2009-08-18
                      - Session Opercoms -                               PACI002

Code  Service                                           Code  Service
-----
*   Allocate/Deallocate CLOG/PLOG                      S   Stop user(s)
*   Issue reactivate CLOG command                       T   Termination Commands
E   Extended Error Recovery                            *   Manage Online Utilities
*   Force CLOG or PLOG switch                          *   User Table Maintenance
L   Lock or unlock files                               *   Replicator Management
*   Reset ONLINE-DUMP-Status
.   Exit
-----
Code ..... _
Userid(ETID) ... _____
CLOG/PLOG Ind .. _
Database ID .... 1955   (WIS1955)

Command ==>
PF1----- PF2----- PF3----- PF4----- PF6----- PF7----- PF8----- PF12-----
Help                Exit                Menu
    
```

The following functions are available to the AOS demo version:

Code	Function
E	Add or delete PIN modules used by the extended error recovery facilities; display, activate or deactivate current PIN routines
L	Display locked files
S	Stop a specific user, all users of a specific file or job, or all inactive users
T	Terminate a session normally (ADAEND)

This section covers the following topics:

- Extended Error Recovery
- Display Locked Files
- Stop User(s)
- Terminate a Session Normally (ADAEND)

Extended Error Recovery

Selecting option E (extended error recovery) from the Session Opercoms menu displays the Extended Error Recovery menu:

```

19:41:23          ***** A D A B A S  BASIC  SERVICES *****          2009-08-18
                   -  Extended Error Recovery  -                          PACIE02

Code      Service
-----
*         Display message buffer
*         Display/modify environment
*         Display/modify Exit routines
M         Add/Delete PIN modules
P         Display/modify PIN routines
*         Refresh threshold and alert exits
*         SNAP a nucleus dump
?         Help
.         Exit
-----

Code ..... _
Start Address .. _____ End Address ... _____
Database ID .... 1955      (WIS1955)

Command ==>
PF1----- PF2----- PF3----- PF4----- PF6----- PF7----- PF8----- PF12-----
Help                Exit                Menu
    
```

From this menu you can

- add or delete PIN modules;
- display, activate, or deactivate specific PIN routines.

Add / Delete PIN Modules

Selecting option M (add/delete PIN modules) from the Extended Error Recovery menu displays a list of currently available PIN modules:

```

16:09:48          ***** A D A B A S  BASIC  SERVICES *****          2009-08-24
DBID 1955          -  Add/Delete PIN Modules  -                          PACIEM2
NUCID .. 1021

Mark entries with 'A' to Add or 'D' to Delete:

M  Module      Description          Message
-  -
-  ADAMXY      Standard Nucleus PIN Routines
-  PINAAF      SAF Security
-  PINAFP      Adabas Fastpath
-  PINATM      Adabas Transaction Manager
-  PINAVI      Adabas Vista
-  PINRSP      Adabas Response Code Handler
-  PINUES      Universal Encoding Support

PF1----- PF2----- PF3----- PF4----- PF6----- PF7----- PF8----- PF12-----
Help                Exit                Menu
    
```

To load a PIN module into memory, enter 'A' in the M column next to the module name.

This command is successful only if the exit module exists in a library accessible to the Adabas nucleus.

To remove a PIN module from memory, enter a 'D' in the M column next to the module name.

When deleting a PIN module from memory, all related PIN routines are also removed.

These functions are the same as the extended error recovery operator commands

```
SMGT, {ADDPIN | DELPIN}=module-name
```

Display/Modify PIN Routines

Selecting option P (display/modify PIN routines) from the Extended Error Recovery menu displays a list of PINs currently loaded in memory:

```

16:10:12          ***** A D A B A S  BASIC  SERVICES  *****          2009-08-24
DBID 1955          - List/Modify PIN Routines -          PACIEP2
NUCID .. 1021
Mark entries with 'A' Activate, or 'D' Deactivate:          Total Pins: 012

```

M	Condition	Error Location	Status	Uses	Module	Message
-	-----	-----	-----	-----	-----	-----
_	000C1000	All Locations	Active	0	ADAMXY	
_	000C2000	All Locations	Active	0	ADAMXY	
_	000C3000	All Locations	Active	0	ADAMXY	
_	000C4000	All Locations	Active	0	ADAMXY	
_	000C5000	All Locations	Active	0	ADAMXY	
_	000C6000	All Locations	Active	0	ADAMXY	
_	000C7000	All Locations	Active	0	ADAMXY	
_	000C8000	All Locations	Active	0	ADAMXY	
_	000C9000	All Locations	Active	0	ADAMXY	
_	000CB000	All Locations	Active	0	ADAMXY	
_	000CF000	All Locations	Active	0	ADAMXY	
_	00047000	All Locations	Active	0	ADAMXY	

```

PF1----- PF2----- PF3----- PF4----- PF6----- PF7----- PF8----- PF12-----
Help          Exit          Refr          --          -          +          Menu

```

For all PIN routines on the list, the screen indicates the conditions that cause them to be executed, the current status, the number of times they have been used, and the module in which they are located.

To change the status of the PINs from this screen, enter in the M column next to the PIN number

- A to activate a PIN
- D to deactivate a PIN

After changes have been made, use PF4 to refresh the screen.

These functions are the same as the extended error recovery operator commands

```
SMGT,DISPLAY=PINS
SMGT,{ACTPIN | DEACTPIN}=pin-number
```

Display Locked Files

Selecting option L from the Session Opercoms menu displays the following:

```
19:43:48          ***** A D A B A S  BASIC  SERVICES *****          2009-08-18
                  - Lock / Unlock Files -                               PACIL02

Code      Service
-----
D         Display locked files
*         Lock file for all users
*         Advance lock file
*         Lock file except for UTI/EXF users
*         Unlock file from general lock
*         Release an advance lock
*         Unlock file from UTI/EXF lock
?         Help
.         Exit
-----

Code .....
File Number ..
UTI/EXF Ind .. U
Database ID .. 1955   (WIS1955)

Command ==>
PF1----- PF2----- PF3----- PF4----- PF6----- PF7----- PF8----- PF12-----
```

Option D from this menu displays the Display Locked Files screen:

Terminate a Session Normally (ADAEND)

Selecting option T from the Session Opercoms menu invokes the Session Termination menu from which you can terminate a session normally (ADAEND).

```

19:47:44          ***** A D A B A S  BASIC  SERVICES *****          2009-08-18
                   -  Session Termination  -                               PACT002

                   Code      Service
                   ----      -
                   A         Normal session termination (ADAEND)
                   *         Cancel session immediately (CANCEL)
                   *         Stop session                    (HALT)
                   ?         Help
                   .         Exit
                   ----      -

Code ..... _
Database ID .. 1955   (WIS1955)

Current nr. of users in User Queue ... 1
Nr. of users with open transactions .. 0

Command ==>
PF1----- PF2----- PF3----- PF4----- PF6----- PF7----- PF8----- PF12-----
Help                Exit                Menu

```

You are prompted to confirm your termination request before the action is taken.

Database Report

Database Report functions, which correspond to selected functions of the Adabas ADAREP utility, provide both general and specific information in either table or report format.

```

19:50:37          ***** A D A B A S  BASIC  SERVICES  *****          2009-08-18
                   - Database Report -                               PDR0002

Code      Service
-----
*         List files with crit. no. of extents
*         Display field description table (FDT)
F         Display file(s)
G         General database layout
*         List VOLSER distribution of database
*         Display ASSO/DATA block (RABN)
*         Display unused storage
?         Help
.         Exit
-----

Code ..... _
File No ..... 0_____ Password ..
Database ID .. 1955 (WIS1955)
VOLSER ..... _____

Command ==>
PF1----- PF2----- PF3----- PF4----- PF6----- PF7----- PF8----- PF12-----
Help          Exit          Menu
    
```

Options available to the AOS demo version allow you to view database-level general information and tables of database files, and file-specific information for any file:

Option	Function
F	Display file(s), either a list of all files in the specified database or detailed information about a specific file.
G	Display the general layout of the specified database.

This section covers the following topics:

- Display Files
- Display General Database Layout

Display Files

If no particular file is specified, option F lists all files in the specified database. If a file is specified, option F provides detailed layout information for the file. Physical device and file layout information is available only for a specific file.

Display a List of Files in the Specified Database

When no file number or "0" (zero) is specified in the File No field on the Database Report menu, a list of the files in the specified database is displayed:


```

18:31:39          ***** A D A B A S BASIC SERVICES *****          2009-08-24
DBID 1955          - Display Files -          PDRF032

Fnr   File Name           Loaded   Top-ISN   Max-ISN   Extents   Ind.   %Used
      YY-MM-DD
-----
  1 EMPLOYEES             09-02-17   1107     1695     2  1  1  1 NNISNNN 77 92
  2 VEHICLES             09-02-17    773     1695     1  1  1  1 NNISNNN 86 12
  3 MISCELLANEOUS       09-02-17   1779     2543     2  1  2  1 NNISNNN 86 53
  6 EXPANDED            09-02-17   1107     1600     1  1  1  1 NNISXKN 74 46
  7 EXPANDED            09-02-17   3107     3600     1  1  1  1 NNISXKN 74 46
10 TRIGGER-FILE        09-02-17    0        1695     1  1  1  1 NNISNNN  8  0
11 NAT-SYSTEM          09-02-17  62118    80559     1  1  1  1 NNISNNU 96 97
12 NAT-USER            09-02-17   366     30527     1  1  1  1 NNISNNN 45 50
13 NAT-FDIC            09-02-17    6        5087     1  1  1  1 NNISNNN 33  1
19 CHECKPOINT          09-02-17   1821     2543     1  1  2  1 NNNSNNN  2  9
20 FILE-1955-20        09-03-04    16        1695     1  1  1  1 NNNSNNN  5 20
21 FILE-1955-21        09-03-04    7         1695     1  1  1  1 NNNSNNN  0 10
22 22-SPAN             09-08-03    35     57663     1  2  2  2 NNNSNNN  0 19
23 REPL BRO           09-07-22   1000    20351     1  1  1  1 NNNSNNN  0  1

PF1----- PF2----- PF3----- PF4----- PF6----- PF7----- PF8----- PF12-----
Help   Repos   Exit   Extents  --      -      +      Menu
AÛ                                02,001
    
```

The PF2 (Reposition) key displays a window in which you can enter a new starting value for the file list. When you enter a file number, the Display Files list begins with that file.

The Display Files screen provides the following information for each file:

- file number and file name;
- date the file was loaded into the database;
- highest ISN currently in use in the file and the highest ISN allowed in the file;
- number of logical extents currently assigned: by Associator (N ormal index; U pper index; A ddress converter) and D ata Storage. A maximum of five logical extents may be allocated to a file.
- block padding factor percentage defined for the Associator and for Data Storage;
- indicators as follows:

A	ADAM option: A = ADAM ISN- or descriptor-selected file; N = non-ADAM file.
C	coupled (C) or non-coupled (N) file.
I	ISNs are reusable (I) or not (N).
S	Data Storage blocks are reusable (S) or not (N).
E	data files are ciphered/encrypted (E) or not (N).
X	files are expanded (X) or normal (N).
U	USERISN option: U = option is in effect for the file; N = option is not in effect.

- percentage of allocated space currently used by the file in the Associator and in Data Storage.

Display Information for a Specific File

When a valid system file number is specified on the Database Report menu, the following Display File Layout information is displayed for that file:

```

18:29:22          ***** A D A B A S  BASIC  SERVICES *****          2009-08-24
DBID 1955          - Display File Layout -                               PDRF043
*****
*   File 11      *   NAT-SYSTEM
*****

Records loaded .... 60754          Date loaded ..... 2009-02-17 19:17:04
TOP ISN ..... 60841          Date of last update .. 2009-06-08 03:34:25
Max ISN expected ... 80559          Max Compr Rec Lngth .. 5060
Minimum ISN ..... 1          Asso/Data Padding ... 10%/10%
Size of ISN ..... 3 Bytes          Highest Index Level .. 3
Number of Updates .. 82862          RPLUPDATEONLY. No   Indx Comp ..... Yes
ISN Reusage ..... Yes          USERISN ..... Yes   PGMREFRESH ..... No
Space Reusage ..... Yes          MIXDSDEV ..... No   NOACEXTENSION .. No
ADAM File ..... No          Spanned rec .. No   MU/PE indices .. 1
Ciphred File ..... No          Replication .. No   Privileged Use . No
Coupled Files ..... None          Universal Encoding ... Yes
Blk per DS Extent .. 0          Logged DSF Changes ... DS AC Index
Blk per UI Extent .. 0          Total Changed Blks ... 28756
Blk per NI Extent .. 0          Multi Client File ... 0
Free space available for file extents: At least 134 Extents
PF1----- PF2----- PF3----- PF4----- PF6----- PF7----- PF8----- PF12-----
Help          Exit          Refresh          Menu

```

The information for the file can be refreshed by pressing PF4 .

You can display additional information about space allocations by pressing ENTER .

The Display File Layout screen displays the following information for the file:

- the file number and name;
- the number of records currently contained in the file;
- ISN information: the highest ISN currently used in the file; the highest ISN planned for the file (see the ADALOD utility's MAXISN parameter); the lowest ISN that can be assigned to a record in the file (see the ADALOD utility's MINISN parameter); whether 3- or 4-byte ISNs are used for the file; and whether ISNs can be reused.
- the total number of updates since the file was last loaded;
- other file option settings: whether Data Storage space can be reused; whether the file was loaded with the ADAM option, the cipher option, the USERISN option; whether the file is physically coupled to another file; whether Data Storage extents can be on different device types; whether the file can be refreshed using the E1 command; whether the file permits the MAXISN setting to be increased.
- the number of blocks allowed per Data Storage, upper index, and normal index extent;
- the date and time the file was last loaded;
- the maximum compressed record length permitted for the file (see the ADALOD utility's MAXRECL parameter);

- the padding factor for the Associator and for Data Storage;
- the highest index level currently active for the file;
- the total number of blocks in the file that have been changed by updates since the file was last loaded;
- the length of the owner ID for multiclient files.
- whether universal encoding support (UES) is being used.

Pressing ENTER from the initial Display File Layout screen displays the following space allocation and usage information:

```

18:33:41          ***** A D A B A S  BASIC SERVICES *****          1999-01-28
DBID 105                - Display File Layout -                          PDRF022

File 75

      IDeviceIListI  Space allocated  I      From      To      I  Unused      I
      I Type ITypeI  Blocks    / Cyls. I      RABN      RABN  I  Blocks / Cyls.I
-----I-----I-----I-----I-----I-----I-----I-----I-----I
      I      I      I      I      I      I      I      I      I      I
ASSO I 3380 I AC I      3      0 I      724 -      726 I      0      0 I
      I 3380 I UI I      15     0 I      747 -      761 I      0      0 I
      I 3380 I NI I      20     0 I      727 -      746 I      0      0 I
      I 3380 I NI I      56     0 I      762 -      817 I      2      0 I
      I      I      I      I      I      I      I      I      I
DATA I 3380 I DS I     116     0 I      216 -      331 I     29     0 I

PF1----- PF2----- PF3----- PF4----- PF6----- PF7----- PF8----- PF12-----
Help                Exit      Refresh                Menu
    
```

Display General Database Layout

Option G displays general database information on the Display General DB-Layout screen:

```

02:11:11          ***** A D A B A S  BASIC  SERVICES *****          2009-08-25
DBID 1955          - Display General DB-Layout -                          PDRG012

Database Name ..... WIS1955
Database Number ..... 1955
Database Version ..... 8.2
Database Load Date ..... 2009-02-17 19:07:58

System Files ..... 19 , 0 , 10 , 0 , 0 , 0 , 0
Maximum Number of Files .. 1000
Number of Files Loaded ... 18
Highest File Loaded ..... 66
Trigger File Number ..... 10

Size of RABN ..... 3 Bytes
Current Log Tape Number .. 77
Delta Save Facility ..... Inactive          Replication Facility ..... Yes
Recovery Aid Facility .... Inactive
Universal Encoding Sup. .. Inactive

PF1----- PF2----- PF3----- PF4----- PF6----- PF7----- PF8----- PF12-----
Help                Exit                Menu

```

You can display additional information about UES codes, coupling, and space allocations by pressing ENTER.

The Display General DB Layout screen displays the following information for the file:

- the name and number of the database;
- the version level of the Adabas database software;
- the date and time the database was loaded;
- the numbers of Adabas system files allocated to the database;
- the maximum number of files permitted for the database; the total number of files currently loaded; and the highest file number currently in use;
- whether 3- or 4-byte RABNs are being used for the file;
- the number of the most recent data protection log tape for the database;
- whether the Adabas Delta Save Facility Facility and/or the Adabas Recovery Aid (ADARAI) are active or inactive for the database.
- whether universal encoding support (UES) is being used.

When universal encoding support (UES) is being used, pressing ENTER from the initial Display General DB-Layout screen lists the current code values:

```

15:51:22          ***** A D A B A S  BASIC  SERVICES  *****          2006-07-20
DBID 105          - Display General DB-Layout -          PDRG002

Universal Encoding Support Enabled

UES Encoding Keys:
Alpha File Encoding ..... 37
Wide File Encoding ..... 4095
Alpha ASCII Encoding ..... 437
Wide User Encoding ..... 4095
    
```

In any case, pressing ENTER from the initial Display File Layout screen displays the following space allocation and usage information:

```

02:15:32          ***** A D A B A S  BASIC  SERVICES  *****          2009-08-25
DBID 1955          - Display General DB-Layout -          PDRG012

      IDeviceI      Total Number of      I      Extents      in Block      I DD-Names I
      I Type I      Blocks /      Cyls. I      From      To      I      I
-----I-----I-----I-----I-----I-----I-----I-----I
      I      I      I      I      I      I      I      I      I
ASSO I 3390 I      16182      60 I      1      16182 I DDASSOR1 I
      I      I      I      I      I      I      I      I      I
DATA I 3390 I      59990      400 I      1      59990 I DDDATAR1 I
      I      I      I      I      I      I      I      I      I
WORK I 3390 I      8091      60 I      1      8091 I DDWORKR1 I

PF1----- PF2----- PF3----- PF4----- PF6----- PF7----- PF8----- PF12-----
Help          Exit          Menu
    
```